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A STUDY ON

PITHA PERUMPADU

(DISSERTATION SUBJECT)

For The Partial Fullfillment Of The

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A CLINICAL EVALUVATION OF SIDDHA MEDICINE PERUMPADUKKU PITTU IN THE TREATMENT OF PITHA PERUMPADU (DYSFUNCTIONAL UTERINE BLEEDING)

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INTRODUCTION

INTRODUCTION

Siddha system of medicine is one of the greatest to which western medicine owes much in its earlier stage of development from the sages of Ancient India to mankind. It is one of the world's most ancient medical discipline. It is not only the system of medicine in the conventional sense of curing disease but it is the way of life. Siddha system of medicine treats man as a whole which is a combination of Body, Mind, Soul.

ஞானமறிந் தோர்க்கு நமனில்லை நாள்தோறும்
பானமதை யுண்டு பசியினால் - ஞானமது
கண்டால் உடலுயி ருங்காயம் வலுவாகும்
உண்டால் அமிர்தரச முண். 10

Therefore it is truly holistic and integrated medical system.

அஞ்சுபஞ்ச பூதம் அறிந்தால் அனித்தியம்போல்
அஞ்சு வசப்படுவ தாண்டதனில் - அஞ்சினையும்
கண்டறி வோர்ஞானக் கார்சி யதினினைவு
விண்டறிய லாமே விதி. 18.

Above lines are written by the Great saint Tiruvalluvar. Siddhars consider our body as universe and compared with panchapudam.

In Siddha system of medicine the physiological components of human body are Vatham(Air),Pitham (Fire),Kapham(Earth and Water).When the normal equilibrium of the 3 humors disturbed ,the disease is caused,so siddhars maintained the body equilibrium.

Siddhars explained about the various types of female ailments in their text, the one is PERUMBADU which means GREAT SUFFERING of women. YUGIMUNI siddhar who classified perumbadu as four types[1]. PITHA PERUMPADU is one among them challenging to medical practitioners of both Allopathy and siddha field. Added that it affects mentally, physically,and economically.

The signs and symptoms of PITHA PERUMPADU can be correlated to the DYSFUNCTIONAL UTERINE BLEEDING [DUB] because the signs and symptoms of the both are more similar.

DUB is more common around the menarche and pre menopause. 1 in 20 women aged 30-49 years consult their GP each year for menstrual disorders. Menstrual disorders are the second most common gynecological condition to be referred to hospital, accounting for around 12% of all gynecological referrals[19].

The currently available drugs for menorrhagia had many side effects and play a major role in the hormone cycle and alter the regular hormonal secretion of the body. Surgical intervention is the only choice in other system of medicine. In this juncture siddha medicine treatment is a boon to the society to skip surgical procedure.

Many herbal and herbo - mineral formulation of medicine practiced in Siddha system of medicine for the treatment of PITHA PERUMPADU [DYSFUNCTIONAL UTERINE BLEEDING (DUB)].

Perumpadukku Pittu is one of the best herbal formulation has been mentioned in siddha literature Athmarachamirtham ennum vaithiya sarasangirdam, Dr. kandasamymudhaliyar-sep2011[2]

The ingredients of the Perumpadukku Pittu are

1. Bark of *Ziziphus mauritiania.lam (Ilandapattai)*
2. Bark of *Lannea coromandelia(houtt)Merr (Othiyampattai),*
3. Bark of *Syzygium cumini.linn(Naavalpattai),*
4. Bark of *Ficus racemosa.linn(Athipattai),*
5. Bark of *Ficus religiosa.linn(Arasapattai.)*
6. Bark of *Mangifera indica.linn(Mampattai),*
7. Bark of *Acacia nilotica(Velampattai)*

As per the Siddha literature above all the ingredients have Anti-menorrhagic action[3]. Backed raw rice powder (pacharasi maavu) will reduce the excessive bleeding present in the young age girls. Palm jaggery (panai vellam) will cure the disease caused by thiridosham.

In the view of modern aspect the most of the above mentioned bark had the pharmacological action to arrest bleeding.

Hence the Author Chosen the drug “PERUMPADUKKU PITTU” for the Pitha Perumpadu as dissertation. This medicine is totally herbal it is more safe , and most effective with cost effective. The ultimate aim is to save the patient from unwanted hysterectomy procedure.

AIM

&

OBJECTIVE

AIM:

To evaluate the therapeutic efficacy of Siddha medicine Perumpadukku Pittu in the treatment of PithaPerumpadu [Dysfunctional Uterine Bleeding(DUB)].

OBJECTIVE:

- Botanical identification and authentification of raw drugs.
- To prepare the trail drug as per the text "Athmaratchamirtham Ennum Vaithiya Sarasangiratham" author Dr.Kandasamy mudhaliyar.(Last edition :Sep 2011).
- To evaluate the physicochemical analysis of perumpadukku pittu.
- To study the efficacy of the test drug through an open clinical trail.
- To conduct an open clinical trail in Pitha Perumbadu [Dysfunctional Uterine Bleeding(DUB)] patients.
- To analyze the prevalence of Pitha Perumpadu among the society through Age, sex, occupation, distribution etc.

REVIEW OF LITERATURE

REVIEW OF LITERATURE SIDDHA

VIEW ON PITHAM

The natural shape of Pitham is Atomic. It is sharp and hot. The ghee melts down salt crystaizes and jiggery melts because of heat. The heat of Pitham is responsible for many actions and their reactions.

பித்தம் உருவாகும் விதம்

"இருப்பான நாடி எழுபதோடீரா

யிரமான தேகத்தில் ஏலப் பெருநாடி

ஓக்கதசமத்தொழிலை ஊக்கதச் வாயுக்கள்

தக்கபடி என்றே சாரும்

சாருந்தசநாடி தன்னில் மூலம் மூன்று

பேருமிடம் பிங்கலையும் பின்னலுடன் - மாறும்

உரைக்க விரற்காற்றோட்டுணர்த்துமே நாசி

வரைச் சுழியோமையத்தில் வந்து

கூட்டுறவு ரேகித்தால் கூறும் வாதம் பித்தம்

நாட்டுங்கபமேயாம் நாடு" **- சித்த மருத்துவாங்க சுருக்கம்**

The seats of Pitham

"தானான பித்தம் பின்கலையைப் பற்றிச்

சாய்வான பிராணவாயு வதனைச் சேர்ந்து

ஊனான நீர்ப்பையிலணுகி மூலத்

துதிதெழுந்த வக்கினியை யறவு செய்து

மானேகே ளிருதயத்தி லிருப்பு மாகி

கோனான சிரந்தனிலே யிறக்க மாகிக்

கொண்டுநின்ற பித்தநிலை கூறினோமே - **-தமிழ் வைத்திய சாதகம**

According to Tamil vaithiya saathagam, the pingalai, urinary bladder, stomach, heat the places where Pitham sustains.

In addition to the above place, the umbilical, epigastric region, stomach, sweat, blood, essence of good, eyes and skin are also the place where pitham sustain

Yugi Muni says that the pitham sustains in urine and the places below the neck.

1. வயிறு
2. ரசதாது
3. இரத்தம்
4. ஊன்
5. வியர்வை
6. கண்கள்
7. பொதுவாக தொப்புளுக்குமேல் இருதயதுக்கு கீழ் உள்ள பகுதிக

THE CHARACTERSTICS OF PITHAM

According to Maruthuva thanipadal

" பசிதாகம் ஓங்கொளிகண் பார்வைபண் டத்து

ருசிதெரி சத்திவெம்மை வீரம் - உசித

மதிகூர்த்தபுத்திவனப் பளித்துக் காக்கும்

அதிகாரி யாங்கா னழல்"

-மருத்துவ தனிப்பாடல்

Pitham is responsible for Digestion, Vision; Maintenance of body temperature, Hunger, Thirst, Taste etc., its other functions includes Thought, Knowledge, Strength and Softness.

According to Pathennen Siddhargal Nadi Sasthiram

" பகுத்திடும் பித்தம் பலபலசிந்தையாம்

வகுத்திடும் வாந்தியும் வாய்நீர்மிகவூறும்

மிகுத்திடும் மேனியின் மாட்டி யெரிப்பேறும்

மிகுத்துத்தவனிக்கு மிகவிடந்கைக்குமெ."

-பதினெண் சித்தர்கள்நாடி சாஸ்திரம்

According to Pathinen Siddhargal Naadi Sasthiram, the character of pitham are vomiting, increased salvation, burning sensation of the body and kaippu in the tongue.

பித்தம் வரலாறு

“பாரடா பித்தமென்ற கிரிச்சனந்தான்
பதினெட்டு வகையாகப் பலித்ததேது
வூரடா யிருக்கின்ற பெரியோர் தம்மை
யொருக்காலே பழித்தனால் வந்தபாவம்
சீரடா பாராமல் தூகஷ்ணித்தல்
சிவத்தலங்க ளதைப்பாழித்தல் சிவமேசெய்தல்
ஆரடா கோபமென்ற பாவத்தாலே
யப்பனே பித்தமது சிரசின் மேலே
மேலேறி யதரந்தகை யெழும்பி
மேகமென்ற புரவியது போலேயாச்சு
மாலேறி பித்துக்கும் பிரமைதொன்றி
மனம்விட்டுக் கூத்தாடி வெளியேயேகிக்
கலேறிப் பசாசுபோற் றிரிந்ததென்ற
காரண்ட கோபமென்ற கருமத்தாலே
பால்கோலு மனமுடைய பெரியோர் சாபம்
பலித்துதடா புத்தி கெட்ட பரிசதாமே.”

-அகத்தியர் கன்ம காண்டம் - 300

According to Agasthiyar Kanma Kaandam, due to the above factors the pitha humour may gets deranged.

The functions of pitham

1. Maintain body temperature
2. Produces reddish or yellowish color of the body.
3. Produces heat energy on digestion of food.
4. Produces sweating,
5. Induce giddiness.
6. Produces bold and the excess blood is let out.
7. Gives yellowish coloration to Skin, Eye, Faces and Urine
8. Produces Anger, Haughtiness, Burning sensation, Inaction and Determination.
9. Gives bitter or Sour taste.

According to Angathipatham, the deranged pitham produce anger, increased

பித்தம் பிரகோபிக்கக் காரணங்கள்

“ஆயுறு பித்த கோப மதிசெயம் வெப்புத் தாகம்
தோய்வுறு மயர்வு மூச்சுச் சொன்மதம் புத்திபேதம்
பாயுறு முனிவு வீரம் பரவிய புளிப்பிலின்பம்
வாயறு முதிரகண்கள் மலஞ்சலம் மஞ்சளாகும்
குணம்பெறும் முகங்கள் மேனி கூர் சிரந்திரங்கி வற்றல்
கணம் பெறும் மனம்வேறாகக் கட்டிடுங் குளிர்காலத்தில்
மணம்பெறுசலமேற் றாகம் வைத்து நாடிடும்பின்வெப்பால்
நிணம்பெறு மதிசாரத்தை நீட்டிடுமுனிவய்பித்தம்”.

-அங்காதிபாதம்

According to Angathipatham, the de ranged pitham produce anger, increased thirst, tiredness, confusion, increased intake of pulippu taste in diet, yellowish coloration of eye, urine and feces, delusion and finally results in fatty diarrhoea.

பிணிதரு பித்த கோபம் பெருகவுண்டாகுமுண்டி

கணிபெறு மடிற்சியுப்புப் புளிப்புறைப் பதிகத் தாலும்

பணிதரு மதுவினாலும் பாரண மிகுதலாலு

மணிதருவெயர்வு வெய்யில் வழிநடை முனிவினாலும்.

According to Angathipatham, increased intake of uppu, pulippu uraippu in diet, alcohol, and prolonged exposure to sun will derange the pitha humour.

“நித்திரை தவிதலாலும் நெடுநேரம் நிற்கையில்

குத்திர விதத்தினாலலுங் கொம்பனார் மருந்திட்டாலும்

சுத்தியில் லாதேகொண்ட அவுஷத தோஷத்தாலும்

பித்தமே பிரகோபித்துப் பெருந்துயர் செய்யுந்காணே.”

According to Thanvandhari, prolonged standing, sleeplessness and unpurified me medicines will derange the pitha humor.

TYPES OF PITHAM:

The pitham is of five types depending upon the location and functions of as follows:

1. **Aakkanal (Anal - pasaka – pitham) – The fire of digestion**

“அழலைவகைத் தென்பரதில் முதன்மை பெற்ற

தாக்கனல்தான் ஜம்பூத மயமாய் மற்றைத்

தழலையுரந் தந்துபுரந் தருமால் உண்ட

சாதத்தைச் செரிபிபித்தி ரசத்தைக் கொண்டு

கழலைவிடுந் திப்பிகளை இரப்பைக்கு மடுங்

காரியஞ்செய் தானத்துக் கிடையே குடியாய்

மழலைமொழி மாதேகேள் சமைக்குமித்தை

வழன்ங்வர்காண் பாசகமா மனல்தா நென்றெ.”

- **மருத்துவத்தனிப்பாடல்**

It lies between the stomach and the intestine and causes digestion and dries up ingested substances.

2. Vanna eri (Ranjagapitham) – Blood promoting fire

This is lies in the stomach and gives red color to the chime and produce blood improves blood.

"இரைப்பைவாழ் வண்ணவெரி, றங்கிப் போந்த

எல்லாவூண் டனக்குமாற்று நிறமொன் றீந்தே

விரைவிலன்ன சத்தெல்லாம் அடுஞ்சாலைக்கே

மேவவைப்ப திரத்தமொட்டு மிதயத் தேய்ந்து

நிறைந்தாற்ற லங்கிநாளும்மதிசேர் மெதை

நெறிவலியால் விரும்பியாங்கு பணிசெய் தெநல்

விரைசெறிமெல் லோதிங்காய் புரக்கும் மெய்யை

விளம்புரஞ்ச கஞ்சாதக முறையே யாமே"

- **மருத்துவத்தனிப்பாடல்**

3. Aarralanki (saadhagapitham) – The fire of energy

It controls the whole body. It has the property of fulfillments.

4. Ozhi thee (Prasagapitam) – The fire of the brightness

It gives color and complexion and brightness to the skin

5. Nokhazhal (Alosaga pitham)– The fire of vision

உரியொளிசெய் யழலதங்குந்தோலிலத்தை

யொள்ளொளித்தீ யெனவிளிப்பர்மீனேய் வாட்சேல்

வரிகொள்க்கி நடுவிருந்து கண்ட காட்சி

வரிகொள்க்கி நடுவிருந்து கண்ட காட்சி

வகை விளக்க மறிவிக்கும் நோக்கு மங்கி

விரியுள நூல்வல்நாவர் கூறுங் காந்தி

மிகுப்பிராச கமாலோச கங்களென்று

தெரிவுள்த்தெ செயல் முறைப்பித்த மைந்தின்

திகழொளிகூர் விழியணங்கே ஜயம் நீந்தே!”

- **மருத்துவத் தனிப்பாடல்**

It lies in the eyes and causes the faculty of vision. It help to visualize things.

கழுத்துக்குக் கீழ்ப்பட்ட நோய் விபரம்

சீரிய கழுத்தின் கீழுள்ள பிணியைத்

தீர்வ தறிந்து திசைபெறச் செப்புவேன்

பாரிய படியும் பரிசில் பிளவையும்

பெருகிய கெண்டை பெருந்தெழு கவுசையும்

இருமலுந் தும்மலும் ஈளையும் வளமாய்

நீருள் மிகுந்து நிறைந்தெழு கோவையும்

பாரொடு மொழியெனப் பரந்தெழு சூலையும்

தன்னினை வின்றித் தவிக்கும் பித்தம்

……..

மிஞ்கிய வாயவ மிகுகி ராணியும்

துன்னிய மற்றசத் தொத்திய மூலமும்

பேருல கறியப் பெருத்த மகோதரம்

……

……..

அருசியும் காச சுவாக முந்தியற்

பிரமேகத்துடன் ஈளையும் மகாசீத

காசமும் மதிசோணிதமும் எடுக்கின்ற

வேண வாயசுடன் முயங்கிய மயக்கமும்

-தேரையர் வாகடம்

பூப்பு நோய்கள்:

பூப்புக் காலை நோவு மிகுதல்

முறைப்படி நாளின் முன்பு பூத்தல்

அந்நா ளெல்லை யகன்று பூத்தல்

திங்க ளிருமுறை மும்முறை பூத்தல்

குருதியருகல் மிகுந்து தோன்றல்

கறுத்தல் வெளிறல் கழுநீர் நிறங்கொளல்

திணிந்து குருதி துணிந்து வீழ்தல்

மிகக் கெடு நாற்றம் வீசல் நுரைத்தல்

ஐந்து நாளின் மிக்கொழ கிடுதல்

சதைத்திரள் தோன்றல் எனுமிவை பிறவும்

கருப்பை வளியினும் பிறவினுந் தோன்றும்

பூப்பு நோய்க ளாமென மொழிப

-மான் முருகியம்

PERUMPADU

Synonyms:

Ratha Rogam

In Ayurvedic

Aurukthra nidanam

Sonidha pradaram

Raktha pratharam

DEFINITION

1. According to Pararasasekaram

வருபெரும் பாட்டு ரோக மண்டியே யிருந்தான் வாலை

தபரு வத்தி னோர்க்குந் தங்கிய சோரிதானும்

பொருமுய லுதிரம் போலப் போந்துவாய் கிழிந்து நாளும்

சொரிவது பெரும்பாடென்று சொல்லுவர் முறை புணர்ந்தோர்

-பரராசசேகரம்

Excessive and profuse menstrual bleeding is called Perumpadu.

2. According **to Manmurikiyam**

வகுத்த முறையின் மடவார்க் கெல்லாம்

குறிவழிக் குருதி மிகுந்துந் தொடர்ந்தும்

ஒழுகல் பெரும்பா டாகுமதுவே

- **மான்முருகியம்**

Abnormal excessive blood loss is defined as *aurukthra nidanam, sonidh aradaram.*

3. According to Agathiyar Gunavagadam

வருகின்ற இரத்தந்தான் பெரும்பாடென் பார்

வன்மையுள்ள இரத்தந்தான் அதிகமானால்

தெரிகின்ற நாளினிலே நின்றிடாமல்

திரேகத்தில் சிலநாட்கள் வடிந்தாலுந் தான்

-அகத்தியர் குணவாடம்

4. **According to Anubava Vaidhya Devaragasiyam**

Abnormal, Profuse, Prolonged discolored menstrual blood flow is defined as " Perumpadu"

Etiology for permpadu

Pitha perumbadu comes under the classification of perumpadu. There fore etiology for perumbadu is applicable for pitha perumpadu also.

Etiology for permpadu

கருதியே கனமான கொடுமை செய்து

கணவனையே நிந்தனைதான் சொன்ன பேரும்

பருதியின் முன் மலசத்தை விட்ட பேரும்

பரதேசியே ழைகளைப் பழிக்கின் றோர்க்கு

குருதியே யிரைக்கின்ற காலந் தன்னில்

கூசாமற் புருஷசங்கை பண்ணினோர்க்கும்

சுருதியே பரயோகம் விரும்பி னோர்க்கும்

சுருக்கிலே பெரும்பா டுற்பவிக்குந் தாமே

தானென்ற காரணிகள் மிகுக்கை யாலும்

சண்டாளக் கோபத்தின் சலிப்பி னாலும்

ஊனென்ற மாமிசங்க பொசித்த லாலும்

ஊறக்கமன்றி விழிதலா லுாழித் தீயால்

பானென்ற பசியன்றிப் பொசிக்கை யாலும்

பாரமாஞ் சுமைவாங்கல் பகலுறக்கம்

கூனென்ற குறுக்கலாம் முடக்கித் துாங்கல்

குரூரமாம் பெரும்பாடு கொட்டுந் தானே

-யூகி வைத்திய சிந்தாமணி.

1. According to Yugivaidhya sinthamani:

- The person who may give / show severe cruel activity to husband
- Voiding of urine and feces infront of the sun.

- Committing the poverty people.
- Make intercourse at the time of menstrual periods.
- Excessive intercourse
- Over consumption of spicy food
- Vigorous angry
- Taking non veg.
- Sleeplessness
- Intake of food during anorexia inactiveness
- Day sleep
- Lifting heavy load
- Increased body temperature

2. According to Pararasasekaam

தானிவை வருமுற் பத்தி தனைச் சொலின் வெப்பினாலும்
மாணவ ரிடவி டாதே மருவுத லாலுங் கெர்ப்பப்
பீனமொட் டித்து நொந்து பிளந்திட லாலு மோகம்
வான்முலை மடந்தை நல்லாய் வருத்த தலாலு முண்டே

-பரராசசேகரம்

Perumabdu is caused by

- Excessive heat
- Sexual indulgence.

உண்டி னங் கறையா காதே யுக்கிர மிகுதியாலும்

மண்டியே பித்தவாதம் வருகிலேற் பனம்ப கைத்துக்

கொண்டிரு முதரங் கெர்ப்ப முடைந்திடக் குடல்க லங்கித்

திண்டிறற் குழன்மா தர்க்குச் சிந்திடும் பெரும்பாடன்றே

-பரராசசேகரம்

Excessive heat, anger, etc disturbance of pitha Vatham and then the confluence agitated Kabam leads to Perumbadu.

3. According to Manmurikiyam

- Alcoholic beverages

- Walking long distances

- Starvation

- Long traveling

- Hard work

- Sexual indulgence.

- Emotion.

- Anxiety

- Depression.

- Sleeplessness.

- Sleeping during day time

- Leucorrhea.

வளிமுதல் மூன்றுங் கருப்பையுற்றுச்

சினவலின் விளையும் என்பர் புலவர்

கப்பையின் மென்றோல் தோன்றலு மழிதலும்

அடிக்கடி நிகழுந் தன்மையாலும்

வளியிற் கெட்ட குருதி யுதனில்

தங்குதலாலும் விளையு மதுவே

-மான் முருகியம்

Three humors gain access into the uterine cavity and get associated with the endometrium causing to waxing and waning periodically re presented by growth and shedding.

4. According to Agathiyar Gunavagadam

பாரேநீ பெரும்பாடு வரும் வகையைக் கேளாய்

பக்குவாமாய் வருகின்ற கண்ட மாலை

ஊரேநீ மூத்திரக் குண்டிக்காயின் ரோகம்

உத்தமனே பீலிகா ரோகந் தானும்

தேரேநீ நாள்பட்ட பாண்டு ரோகம்

தெளிவாக இந்தரோகம் தன்னா லையா

சீரேநீ சினைப்பைக்கும் கருப்பைக்கு மப்பா

சிறப்பாக அதிகரத்த மேறுங்காணே - **அகத்தியர் குணவாகடம்**

Permubadu is caused by

Thyroid disorders

Chronic renal diseases

Splenic Pathology

Chronic anemia

Ovarian and uterine disorders.

காணுவாய் சூதகம் வெளியாகு மப்பா

கருப்பைதான் அழலை கொண்டு போவதாலே

பூணுவாய் சம்போக மதிகத் தாலும்

பொல்லாத புத்துகளாற் கட்டியாலும்

பேணுவாய் பெரும்பா டுண்டா மென்று

பெலமாகத் தான் சொல்வாய் உலகத்தோர்க்கு

காணுவாய் அப்போது கருப்பை நின்று

கருவான இரத்தந்தான் வருகந் தானே

-அகத்தியர் குணவாகடம்

Permubadu is caused by

Inflammation of uterus

Excessive sexual indulgence

Malignant and benign tumors of uterus.

5. According to Jeevarakshanmirtham

Perumbadu is caused by

Gluttony,

Over eating,

Lying over rough surfaces

Excessive coitus

Menstrual disorders

Excessive heat

Immorality

Possesed.

6. According to Anubava Vaidhya Devaragasiyam

Perumbadu is caused by

Consuming hot food,

Over eating

Indigestion

Inflammation of uterus

Mountaineering

Accustomed exercise

Fasting / Starvation

Trauma

Altered sleep rhythm

CLASSIFICATIONS OF PERUMPADU IN SOME BOOKS

Sl. No	Names of the Books	Types
1.	Yoogi Vaithiya Sinthamani	4
2.	ManMurkiyam	4
3.	Anubava vaidhya Devaragasiam	4

1.**According to Manmurikiyam**

வளி முதல் மூன்றுந் தனித்துங் கலந்தும்

வருதலின் அதுநால் வகைப்படு மென்ப

-மான் முருகியம்

Perumbadu is classified into 4 type

1. Vatha Perumpadu
2. **Pith perumpadu**
3. Kabha perumpadu
4. Thontha perumpadu

A.**Vatha perumpadu**

கருத்துஞ் சிவந்தும் நுரைத்தும் குருதி

தசைகழு நீர்போல் சிறிதுசிறிதாக

ஒழுகுதல் வளிப் பெரும் பாட்டின் குறியே

வளியி னியக்கமுந் தோன்றிடு மென்ப

-மான் முருகியம்

Vatha perumbadu is characterized by

-Blackish red frothy bleeding

-Thick viscous vaginal discharge

Small amount of discharge blood as that of " a meat wash".

B. Pitha perumbadu

மஞ்சளாகியும் நீல மாகியும்

கறுத்துஞ் சிவந்தும் பலவாறாக

வெம்பியும் விரைந்துங் குருதி யொழுக்கல்

அன்ற பெரும் பாட்டின் குறியென மொழிப

அனற்பிணி பிறவுந் தோன்றிடு மென்ப

-மான் முருகியும்

Pitha perumbadu is characterised by

-Yellowish, bluish and blackish, red vaginal discharge

-Flow of blood is hot and flushing

C. Kaba peumbadu

வெளுத்தும் பசையொடு மேவியும் குருதி

வரிநெல் கழுவிய நீரென வொழுகல்

ஐயின் வருபெரும் பாட்டின் குறியே

-மான் முருகியும்

Kaba perumbadu is characterized by

-Pale white, mucoid, jelly like, vaginal discharge is like a “paddy was

2. According to Yugi vaidhya chinthamani

உரைசெய்த பெரும்பாடு நால தாகும்

உகந்துமே வாத்தின் சிராவ மொன்று

புரைசெய்த பித்தத்தின் சிராவ மொன்று

பேரான சேட்டுமத்தின் சிராவ மொன்று

துரைசெய்த தொந்தமாஞ் சிராவ மொன்று

துகையெல்லாம் நாவிதச் சிராவ மாச்சு

கரைசெய்த விதனுடைய உற்பத்தி யெல்லாம்

கண்டபடி சொல்லவே கருதிடாயே

-யூகி வைத்திய சிந்தாமணி

Saint Yugi classified the perumbadu into 4 types

1. Vatha perumbadu
2. **Pitha perumbadu**
3. Kaba perumbadu
4. Thontha perumbadu

According to Anubava vaidhya devaragasiam

Perumbadu is classified into 4 types. They are

1. Vatha perumbadu
2. **Pitha perumbadu**
3. Kaba perumbadu
4. Mukkutra perumbadu

Clinical features

1. According to Manmurikiyam

செவ்விள நீர் போல குருதியொழுகல்

கைகால் தளர்தல் உடம்பு களைத்தல்

கருக்குழி யுந்தி யிவைபுண் ணாதல்

ஆற்றல் குறைதல் வெம்பல் புலம்பல்

பொறிகள் தளர்தல் தலை சுழன்றிடுதல்

வயிறுநோதல் மயலுறல் மயங்கல்

வெளிறல் மடிமை குளிர்ச்சி நடுக்கம்

செயலறல் மயலுறல் இழைகள் நோதல்

எனுமிவை பிறவும் எழு பெறும் பாட்டில்

அடைதருங் குறிக லாமென மொழிப - **-மான் முருகியம்**

Clinical features

-Bleeding is like red tender coconut

-Malaise

-Fatigue

-Inflammation of uterine cavity and abdomen viscera

-Weakness of body organs

-Lamentation

-Giddiness

-Loss of function

-State of confusion

-Abdominal pain

-Tremors

According to Athmaraksha mirdham:-

சையோகஞ் செய்யத் தனித்த சுழியோடும்

மெய்யாக விந்து விழவிழப் புண்ணாகும்

மையூருங் கண்ணாட்கு மகத்தாம் பெரும்பாடங்

கொய்யூருங் தண்டினிற் கொப்பளிக்கு மிரத்தம்

Perumbadu is characterized by, Profuse menstrual bleeding .

According to Davnvantri Vaidhyam – II part.

கையுடன் காலுங் காந்துற் காத்திர முலர்ந்து வற்று

மையலாங் கலவிதன்னை மறுத்திடுங் கர்ப்பங் கேடாஞ்

செய்யநீர் போலுஞ்சற்றே சிவந்திடுங் குருதி போலும்

பெய்யுமே யாகில் மானே பெரும்பாடென்றறி குவீரே

It is characterized by

-Burning sensation in hands and legs.

-Failure of conception.

-Watery reddish discharge from vagina.

According to Agathiyar – 2000

இரத்தமொருக்கல் தகையாமல் லெனவெயோடு போல் வீழும்

திருக்கம் சிரத்தில் கனப்பு முண்டாகுத் திதமாய் சசிதகி(றி) விழுமி ரத்தம்

சாத்தரெத்த ரோகமெனச் சொல்லும் நல்லவல் லோரே

It is characterized by

-Excessive blood discharge with clots

-Head ache

According to Sarabebdrar vaidhya muraigal

It is characterized by

Countenance

Shrunken eyes

Excessive coitus

Excessive bleeding

Aching pain all over the body

According to Anubava Vaidhya Devaragasiyam

It is characterized by

Excessive menstrual bleeding

Vague abdominal pain

According to pararasasekaram

நின்றடல் வெதம்பிச் சென்னி நித்தமு நொந்து காது

பொன்றவே யிடித்துத் தண்ணீர் போலவும் டாகமாகி

அன்றவே யுடம்பெ ரித்துக் கீழவயிறது கனத்துக்

கன்றிட வருத்தஞ் செய்யுங் கடுபெரும் பாட்டுரோகம்

In addition to the classical signs and symptoms of excessive menstrual bleeding some more associated signs and symptoms are also given in Pararasasekaram.

They are

Head ache,

Throbbing pain with discharge in the ear

Lower abdominal pain.

According to Yugivaidhya sinthamani

1. ***Pitha perumbadu***

Symptoms of Pitha perumbadu

Loss of Appetite,

Yellowish vaginal discharge

Pallor of the body

Pain in the both lower and upper limbs,

Passing of dark blood clots,

Burning sensation of the body

2. ***Symptoms of vatha perumbadu***

Head ache

Body pain

Lumago

Complexion changes

Subjectiv feeling of fullness of the abdomen

Excessive menstrual bleeding

Menstrual bleeding reddish black colour with offensive odour

3. ***Symptoms of Kapa perumbadu***

Palpitation

Cough with giddiness

White colour menstrual bleeding

Excessive foul smell

Ash colour complexion

Dyspnoea

4. Symptoms of Thontha perumbadu

Abdominal distension

Foul smell

Reddish black colour of manstural bleeding seen

Tremor seen in head

Excessive salivation

According to T.V.S dictionary explanation

An immoderate secretion of the menstrual discharge perumbadu pith perumbadu is one type of perumbadu. Menorrhagia of pitha type is marked by pain in the waist below the naval, in the sides and in the chest or breasts. The menstrual flow continues, sometime for the whole month or even two. In some varieties the symptoms are burning sensation and pain in the eyes palms of the hand and the vagina. The discharge is mixed with slimy secretions. It may also appear at an interval of 3 or 4 months or even longer then that. The breasts may become heavy and swollen and body emaciated.

Naadi Nadai for Perumpadu

பித்தநாடி

உறுதியுள்ள பித்தமது தோன்றில் வெப்பு

உஷ்ணவாயு வத்திசுர மதிரா ரங்கள்

மறதியுடன் கிறுகிறுப்பு பயித்திய ரோகம்

வளர்சோகை யழலெரிவு காந்தல் கைப்பு

இருதயத்தில் கலத்தமது மறப்பு தாகம்

எழுங்கனவு மேயனைவு மயக்க மூர்ச்சை

சிறுதுபெறும் பாடுரத்தம்பிரமே கங்கள்

சேர்ந்து மிகு பிணிபலவுஞ் சிறக்குந் தானே

-சதக நாடி

வாத மிகுதியுடன் உஷ்ணமுஞ் சேர்ந்ததாலேற்படும் குறிகுணங்கள்:-

சிறப்பான வாதத்தி லுட்டிணந் தானே
சேர்ந்திடுக லதிசார முளைச்சல் வாயு
உரைப்பான பொருமலொடு அக்கினி மந்தம்
உள்ளாகும் நீர்ச்சிறுப்பு பிரமே கங்கள்
பிறப்பாடு மதகரிநீர் கரப்பான் ரத்தம்
பிரமேகம் பெரும்பாடு புறநீர்க்கோவை
அறப்பான வாயுசூலை சேத்தும ரோகம்
ஆனபல பிணிகளுமே வந்தடருந் தானே

-சதக நாடி

அசாத்தியம் - சாத்தியம்

சூட்டியதோ ரசாத்தியத்தைச் சொல்லக்கேளாய்
சொலும்சேட்ப பெரும்பாடு தொந்தசசி ராவம்
பூட்டினதோ ரிரண்டும் பிழைக் கொட் டாது
புகழான சாத்தியத்தை விளம்பக் கேளாய்
வாட்டினதோர் வாதத்தின் பெரும்பா டோடு
வகையான பித்தத்தின் சிராவந் தானும்
தீட்டினதோர் மருந்துக்குச் செயமு மாகும்
செப்பினதோர் நன்னூலைத் தெளிந்து பாரே

-யூகி வைத்திய சிந்தாமணி

Vatha Perumabdu and pitha perumbadu are curable.

Kaba perumabdu, Thontha perumabdu are incurable.

பெரும்பாட்டிலுண்டாம் தோடக்குறி குணங்கள்

தேகத்தூறு மனலும் தீதாமதி லெரிச்சல்

வேகப்பெரும்பாடு வெண்ணிறமாய்ப் - போகவதில்

நாற்றமேல்மூச்சு நவிலக்கப மயக்கம்

தோற்றவுடல் சாயுஞ் சொல்

-நோய் நாடல் முதல் பாகம்

According to Manmurikiyam

அடிக்கடி குருதியொடுகல் வெம்பல்

புனல்வேட் டிடுதல் குருதி குறைதல்

ஆற்றல் குறைதல் காய்ச்சல் தோன்றல்

எனுமிவை தீராக் குறிகளாகும் - **-மான் முருகியம**

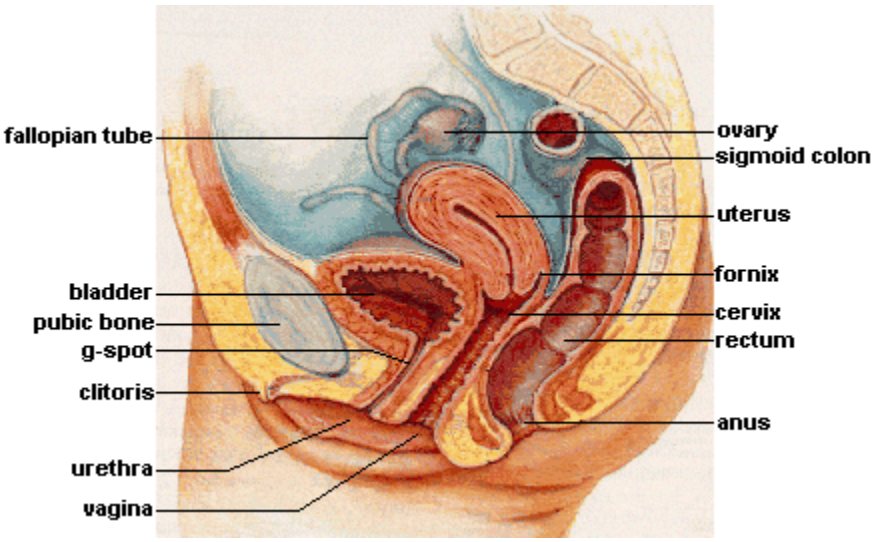
.

If and when the menstrual bleeding in pale in colour with offensive odour and with burning sensation over the body breathlessness, palpitation, cough, giddiness, Anaemia, excessive body heat present in that patient, this perumbadu is deemed to be incurable.

REVIEW
OF LITERATURE
B.MODERN ASPECT

REPRODUCTION

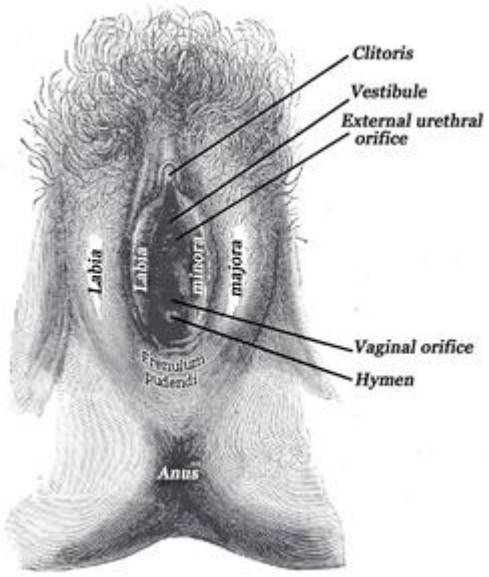
Reproduction can be defined as the process by which an organism continues its species. In the human reproductive process, two kinds of sex cells (gametes), are involved: the male gamete (sperm), and the female gamete (egg or ovum). These two gametes meet within the female's uterine tubes located one on each side of the upper pelvic cavity, and begin to create a new individual. The female needs a male to fertilize her egg; she then carries offspring through pregnancy and childbirth.



FEMALE REPRODUCTIVE SYSTEM

- Produces eggs (ova)
- Secretes sex hormones
- Receives the male spermatazoa during
- Protects and nourishes the fertilized egg until it is fully developed
- Delivers fetus through birth canal
- Provides nourishment to the baby through milk secreted by mammary glands in the breast

External Genitals



Vulva

The external female genitalia is referred to as vulva. It consists of the labia majora and labia minora (while these names translate as "large" and "small" lips, often the "minora" can protrude outside the "majora"), mons pubis, clitoris, opening of the urethra (meatus), vaginal vestibule, vestibular bulbs, vestibular glands.

Mons Veneris

The **mons veneris**, Latin for "mound of Venus" (Roman Goddess of love) is the soft mound at the front of the vulva (fatty tissue covering the pubic bone). It is also referred to as the mons pubis. The mons veneris protects the pubic bone and vulva from the impact of sexual intercourse. After puberty, it is covered with pubic hair, usually in a triangular shape.

Labia Majora

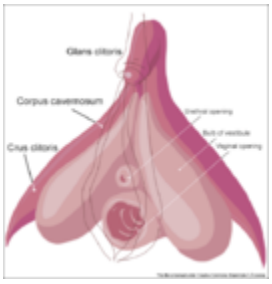
The **labia majora** are the outer "lips" of the vulva. They are pads of loose connective and adipose tissue, as well as some smooth muscle. The labia majora wrap around the vulva from the mons pubis to the perineum. The labia majora generally hides, partially or entirely, the other parts of the vulva. There is also a longitudinal separation called the pudendal cleft. These labia are usually covered with pubic hair. The color of the outside skin of the labia majora is usually close to the overall color of the individual, although there may be some variation. The inside skin

is usually pink to light brown. They contain numerous sweat and oil glands. It has been suggested that the scent from these oils are sexually arousing.

Labia Minora

Medial to the labia majora are the labia minora. The **labia minora** are the inner lips of the vulva. They are thin stretches of tissue within the labia majora that fold and protect the vagina, urethra, and clitoris. The appearance of labia minora can vary widely, from tiny lips that hide between the labia majora to large lips that protrude. There is no pubic hair on the labia minora, but there are sebaceous glands. The two smaller lips of the labia minora come together longitudinally to form the prepuce, a fold that covers part of the clitoris. The labia minora protect the vaginal and urethral openings. Both the inner and outer labia are quite sensitive to touch and pressure.

Clitoris



The **clitoris**, visible as the small white oval between the top of the labia minora and the clitoral hood, is a small body of spongy tissue that functions solely for sexual pleasure. Only the tip or glans of the clitoris shows externally, but the organ itself is elongated and branched into two forks, the crura, which extend downward along the rim of the vaginal opening toward the perineum. Thus the clitoris is much larger than most people think it is, about 4" long on average.

The clitoral glans or external tip of the clitoris is protected by the prepuce, or clitoral hood, a covering of tissue similar to the foreskin of the male penis. However, unlike the penis, the clitoris does not contain any part of the urethra.

During sexual excitement, the clitoris erects and extends, the hood retracts, making the clitoral glans more accessible. The size of the clitoris is variable between women. On some, the clitoral glans is very small; on others, it is large and the hood does not completely cover it.

Urethra

The opening to the urethra is just below the clitoris. Although it is not related to sex or reproduction, it is included in the vulva. The **urethra** is actually used for the passage of urine. The urethra is connected to the bladder. In females the urethra is 1.5 inches long, compared to males whose urethra is 8 inches long. Because the urethra is so close to the anus, women should always wipe themselves from front to back to avoid infecting the vagina and urethra with bacteria. This location issue is the reason for bladder infections being more common among females.

Hymen

The hymen is a thin fold of mucous membrane that separates the lumen of the vagina from the urethral sinus. Sometimes it may partially cover the vaginal orifice. The hymen is usually perforated during later fetal development.

Because of the belief that first vaginal penetration would usually tear this membrane and cause bleeding, its "intactness" has been considered a guarantor of virginity. However, the hymen is a poor indicator of whether a woman has actually engaged in sexual intercourse because a normal hymen does not completely block the vaginal opening. The normal hymen is never actually "intact" since there is always an opening in it. Furthermore, there is not always bleeding at first vaginal penetration. The blood that is sometimes, but not always, observed after first penetration can be due to tearing of the hymen, but it can also be from injury to nearby tissues.

A tear to the hymen, medically referred to as a "transection," can be seen in a small percentage of women or girls after first penetration. A transection is caused by penetrating trauma. Masturbation and tampon insertion can, but generally are not forceful enough to cause penetrating trauma to the hymen. Therefore, the appearance of the hymen is not a reliable indicator of virginity or chastity.

Perineum

The perineum is the short stretch of skin starting at the bottom of the vulva and extending to the anus. It is a diamond shaped area between the symphysis pubis and the coccyx. This area forms

the floor of the pelvis and contains the external sex organs and the anal opening. It can be further divided into the urogenital triangle in front and the anal triangle in back.

The perineum in some women may tear during the birth of an infant and this is apparently natural. Some physicians however, may cut the perineum preemptively on the grounds that the "tearing" may be more harmful than a precise cut by a scalpel. If a physician decides the cut is necessary, they will perform it. The cut is called an episiotomy.

Internal Genitals

Vagina

The **vagina** is a muscular, hollow tube that extends from the vaginal opening to the cervix of the uterus. It is situated between the urinary bladder and the rectum. It is about three to five inches long in a grown woman. The muscular wall allows the vagina to expand and contract. The muscular walls are lined with mucous membranes, which keep it protected and moist. A thin sheet of tissue with one or more holes in it, called the hymen, partially covers the opening of the vagina. The vagina receives sperm during sexual intercourse from the penis. The sperm that survive the acidic condition of the vagina continue on through to the fallopian tubes where fertilization may occur.

The vagina is made up of three layers, an inner mucosal layer, a middle muscularis layer, and an outer fibrous layer. The inner layer is made of vaginal rugae that stretch and allow penetration to occur. These also help with stimulation of the penis.Microscopically the vaginal rugae has glands that secrete an acidic mucus (pH of around 4.0.) that keeps bacterial growth down. The outer muscular layer is especially important with delivery of a fetus and placenta.

Function of the Vagina

- Receives a male's erect penis and semen during sexual intercourse.
- Pathway through a woman's body for the baby to take during childbirth.
- Provides the route for the menstrual blood (menses) from the uterus, to leave the body

Clinical Application:

Pelvic inflammatory disease (PID) is a widespread infection that originates in This condition, which occurs in about 10% of women is usually caused by chlamydial or gonorrheal infection, other bacteria infecting the vagina may be involved as well. Signs and symptoms include tenderness of the lower abdomen, fever, and a vaginal discharge. Even a single episode of PID can cause infertility, due to scarring that blocks the uterine tubes. Therefore, patients are immediately given broad-spectrum antibiotics whenever PID is suspected.

Cervix

The **cervix** (from Latin "neck") is the lower, narrow portion of the uterus where it joins with the top end of the vagina. Where they join together forms an almost 90 degree curve. It is cylindrical or conical in shape and protrudes through the upper anterior vaginal wall. Approximately half its length is visible with appropriate medical equipment; the remainder lies above the vagina beyond view. It is occasionally called "cervix uteri", or "neck of the uterus".

During menstruation, the cervix stretches open slightly to allow the endometrium to be shed. This stretching is believed to be part of the cramping pain that many women experience. Evidence for this is given by the fact that some women's cramps subside or disappear after their first vaginal birth because the cervical opening has widened.

The portion projecting into the vagina is referred to as the portio vaginalis or **ectocervix**. On average, the ectocervix is three cm long and two and a half cm wide. It has a convex, elliptical surface and is divided into anterior and posterior lips. The ectocervix's opening is called the external os. The size and shape of the external os and the ectocervix varies widely with age, hormonal state, and whether the woman has had a vaginal birth. In women who have not had a vaginal birth the external os appears as a small, circular opening. In women who have had a vaginal birth, the ectocervix appears bulkier and the external os appears wider, more slit-like and gaping.

The passageway between the external os and the uterine cavity is referred to as the **endocervical canal**. It varies widely in length and width, along with the cervix overall. Flattened anterior to posterior, the endocervical canal measures 7 to 8 mm at its widest in reproductive-aged women.

The endocervical canal terminates at the internal os which is the opening of the cervix inside the uterine cavity.

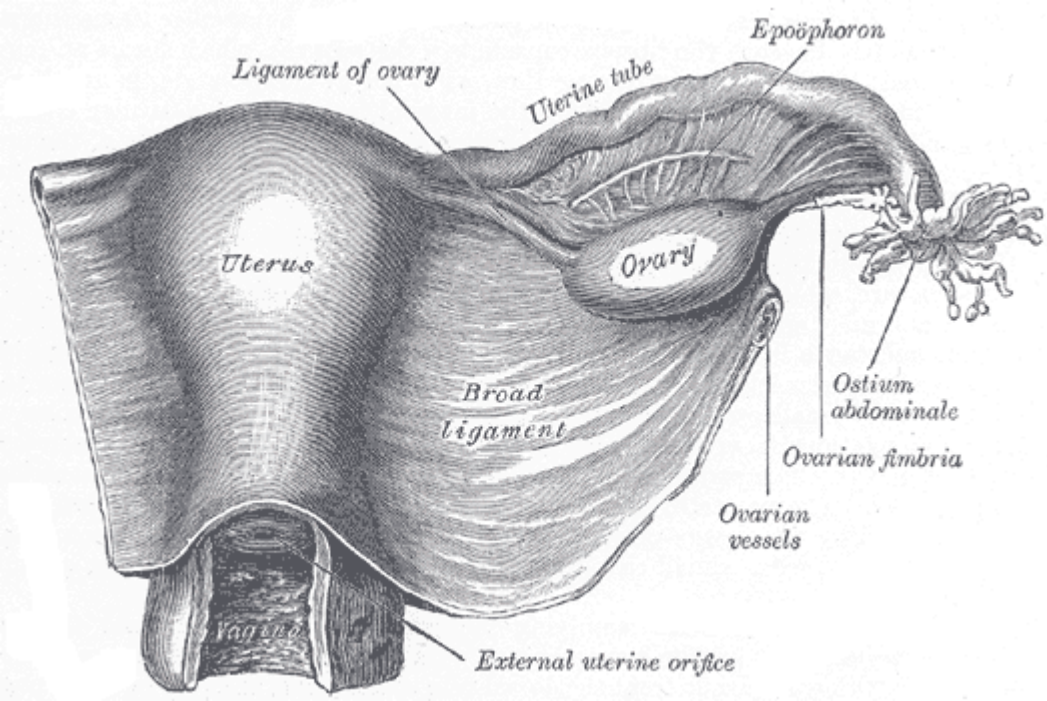
During childbirth, contractions of the uterus will dilate the cervix up to 10 cm in diameter to allow the child to pass through. During orgasm, the cervix convulses and the external os dilates.

Uterus

The **uterus** is shaped like an upside-down pear, with a thick lining and muscular walls. Located near the floor of the pelvic cavity, it is hollow to allow a blastocyte, or fertilized egg, to implant and grow. It also allows for the inner lining of the uterus to build up until a fertilized egg is implanted, or it is sloughed off during menses.

The uterus contains some of the strongest muscles in the female body. These muscles are able to expand and contract to accommodate a growing fetus and then help push the baby out during labor. These muscles also contract rhythmically during an orgasm in a wave like action. It is thought that this is to help push or guide the sperm up the uterus to the fallopian tubes where fertilization may be possible.

The uterus is only about three inches long and two inches wide, but during pregnancy it changes rapidly and dramatically. The top rim of the uterus is called the fundus and is a landmark for many doctors to track the progress of a pregnancy. The uterine cavity refers to the fundus of the uterus and the body of the uterus.

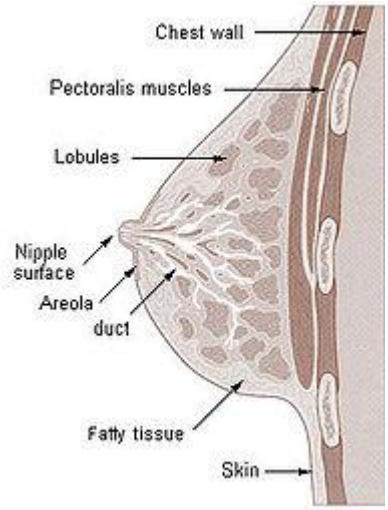


Fallopian Tubes

At the upper corners of the uterus are the **fallopian tubes**. There are two fallopian tubes, also called the uterine tubes or the oviducts. Each fallopian tube attaches to a side of the uterus and connects to an ovary. They are positioned between the ligaments that support the uterus. The fallopian tubes are about four inches long and about as wide as a piece of spaghetti. Within each tube is a tiny passageway no wider than a sewing needle. At the other end of each fallopian tube is a fringed area that looks like a funnel. This fringed area, called the infundibulum, lies close to the ovary, but is not attached. The ovaries alternately release an egg. When an ovary does ovulate, or release an egg, it is swept into the lumen of the fallopian tube by the fimbriae.

Once the egg is in the fallopian tube, tiny hairs in the tube's lining help push it down the narrow passageway toward the uterus. The oocyte, or developing egg cell, takes four to five days to travel down the length of the fallopian tube. If enough sperm are ejaculated during sexual intercourse and there is an oocyte in the fallopian tube, fertilization will occur. After fertilization occurs, the zygote, or fertilized egg, will continue down to the uterus and implant itself in the uterine wall where it will grow and develop.

Mammary glands



Cross section of the breast of a human female.

Mammary glands are the organs that produce milk for the sustenance of a baby. These exocrine glands are enlarged and modified sweat glands.

Structure

The basic components of the mammary gland are the **alveoli** (hollow cavities, a few millimetres large) lined with milk-secreting epithelial cells and surrounded by myoepithelial cells. These alveoli join up to form groups known as **lobules**, and each lobule has a **lactiferous duct** that drains into openings in the nipple. The **myoepithelial** cells can contract, similar to muscle cells, and thereby push the milk from the alveoli through the lactiferous ducts towards the nipple, where it collects in widenings (sinuses) of the ducts. A suckling baby essentially squeezes the milk out of these sinuses.

The development of mammary glands is controlled by hormones. The mammary glands exist in both sexes, but they are rudimentary until puberty when - in response to ovarian hormones - they begin to develop in the female. Estrogen promotes formation, while testosterone inhibits it.

At the time of birth, the baby has lactiferous ducts but no alveoli. Little branching occurs before puberty when ovarian estrogens stimulate branching differentiation of the ducts into spherical masses of cells that will become alveoli. True secretory alveoli only develop in pregnancy, where

rising levels of estrogen and progesterone cause further branching and differentiation of the duct cells, together with an increase in adipose tissue and a richer blood flow.

Colostrum is secreted in late pregnancy and for the first few days after giving birth. True milk secretion (lactation) begins a few days later due to a reduction in circulating progesterone and the presence of the hormone prolactin. The suckling of the baby causes the release of the hormone oxytocin which stimulates contraction of the myoepithelial cells.

The cells of mammary glands can easily be induced to grow and multiply by hormones. If this growth runs out of control, cancer results. Almost all instances of breast cancer originate in the lobules or ducts of the mammary glands[15].

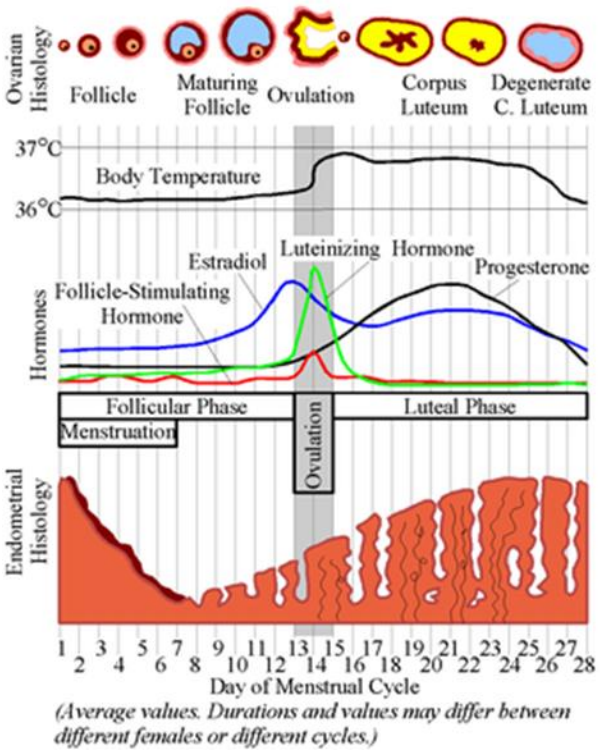
STRUCTURE	**LOCATION & DESCRIPTION**	**FUNCTION**
Breasts	Upper chest one on each side containing alveolar cells (milk production), myoepithelial cells (contract to expel milk), and duct walls (help with extraction of milk).	Lactation milk/nutrition for newborn.
Cervix	The lower narrower portion of the uterus.	During childbirth, contractions of the uterus will dilate the cervix up to 10 cm in diameter to allow the child to pass through. During orgasm, the cervix convulses and the external os dilates
Clitoris	Small erectile organ directly in front of the vestibule.	Sexual excitation, engorged with blood.
Fallopian tubes	Extending upper part of the uterus on either side.	Egg transportation from ovary to uterus (fertilization usually takes place here).

Hymen	Thin membrane that partially covers the vagina in young females.	
Labia majora	Outer skin folds that surround the entrance to the vagina.	Lubrication during mating.
Labia minora	Inner skin folds that surround the entrance to the vagina.	Lubrication during mating.
Mons	Mound of skin and underlying fatty tissue, central in lower pelvic region	
Ovaries (female gonads)	Pelvic region on either side of the uterus.	Provides an environment for maturation of oocyte. Synthesizes and secretes sex hormones (estrogen and progesterone).
Perineum	Short stretch of skin starting at the bottom of the vulva and extending to the anus.	
Urethra	Pelvic cavity above bladder, tilted.	Passage of urine.
Uterus	Center of pelvic cavity.	To house and nourish developing human.
Vagina	Canal about 10-8 cm long going from the cervix to the outside of the body.	Receives penis during mating. Pathway through a womans body for the baby to take during childbirth. Provides the route for the menstrual blood (menses) from the uterus, to leave the body. May hold forms

		of birth control, such as an IUD, diaphragm, neva ring, or female condom
Vulva	Surround entrance to the reproductive tract.(encompasses all external genitalia)	
Endometrium	The innermost layer of uterine wall.	Contains glands that secrete fluids that bathe the utrine lining.
Myometrium	Smooth muscle in uterine wall.	Contracts to help expel the baby.

[22]

Menstrual cycle



Ovarian Cycle	Events	Uterine Cycle	Events
Follicular phase - Days 1-13	FSH secretion begins.	Menstruation - Days 2-5	Endometrium breaks down.
	Follicle maturation occurs.	Proliferative phase - Days 6-13	Endometrium rebuilds.
	Estrogen secretion is prominent.		
Ovulation - Day 14*	LH spike occurs.		
Luteal phase - Days 15-28	LH secretion continues.	Secretory phase - Days 15-28	Endometrial thickens, and glands are secretory.
	Corpus luteum forms.		
	Progesterone secretion is prominent.		

[22]

THE MENSTRUAL CYCLE

The menstrual cycle is the scientific term for the physiological changes that can occur in fertile women for the purposes of sexual reproduction and fertilization. Each menstrual cycle is a complex interaction between the Hypothalamus, Pituitary Gland, Ovaries and Endometrium.

This can be summarized by the following Cyclic Changes:

o Gonadotropin Releasing Hormone GnRH, produced by the hypothalamus, acts on the pituitary gland o Follicular Stimulating Hormone FSH and Luteinizing Hormone LH, produced by the pituitary gland, act on the ovary; resulting in functional as well as morphological changes.

o Changes in the ovary include; follicular maturation, ovulation and corpus luteum formation.

o Changes in the endometrium include; proliferation and secretion phases, allowing successful implantation of the developing embryo to happen, or the physiological endometrial shedding in absence of fertilization (i.e. menstrual cycle)

HYPOTHALAMIC-PITUITARY AXIS

o The hypothalamus controls the pituitary gland by "releasing hormones".

o GnRH, secreted in a pulsatile fashion, is a peptide hormone that is very important in the synthesis and release of the trophic hormones of the pituitary

o The Gonadotropins; FSH and LH, which are glycoproteins, contain alpha and beta subunits. o The beta subunit is specific to every individual while the alpha subunit is same among all individuals.

MENSTRUATION (Ovarian and Uterine Cycles)

The menstrual cycle can be described by the ovarian or uterine cycle. The ovarian cycle describes changes that occur in the follicles of the ovary whereas the uterine cycle describes changes in the endometrial lining of the uterus. Both cycles can be divided into three phases. The ovarian cycle consists of the follicular phase, ovulation, and the luteal phase whereas the uterine cycle consists of menstruation, proliferative phase, and secretory phase.

Ovarian cycle

Follicular phase

The follicular phase is the first part of the ovarian cycle. During this phase, the ovarian follicles mature and get ready to release an egg. The latter part of this phase overlaps with the proliferative phase of the through the influence of a rise in follicle stimulating hormone (FSH) during the first days of the cycle, a few ovarian follicles are stimulated. These follicles, which were present at birth and have been developing for the better part of a year in a process known as folliculogenesis, compete with each other for dominance. Under the influence of several hormones, all but one of these follicles will stop growing, while one dominant follicle in the

ovary will continue to maturity. The follicle that reaches maturity is called a tertiary, or Graffian, follicle, and it contains the ovum.

Ovulation*:*

An ovary about to release an egg .Ovulation is the second phase of the ovarian cycle in which a mature egg is released from the ovarian follicles into the oviduct. During the follicular phase, estradiol suppresses production of luteinizing hormone (LH) from the anterior pituitary gland. When the egg has nearly matured, levels of estradiol reach a threshold above which this effect is reversed and estrogen stimulates the production of a large amount of LH. This process, known as the LH surge, starts around day 12 of the average cycle and may last 48 hours.

The exact mechanism of these opposite responses of LH levels to estradiol is not well understood. In animals, a gonadotropin-releasing hormone (GnRH) surge has been shown to precede the LH surge, suggesting that estrogen's main effect is on the hypothalamus, which controls GnRH secretion. This may be enabled by the presence of two different estrogen receptors in the hypothalamus: estrogen receptor alpha, which is responsible for the negative feedback estradiol-LH loop, and estrogen receptor beta, which is responsible for the positive estradiol-LH relationship. However, in humans it has been shown that high levels of estradiol can provoke abrupt increases in LH, even when GnRH levels and pulse frequencies are held constant, suggesting that estrogen acts directly on the pituitary to provoke the LH surge.

The release of LH matures the egg and weakens the wall of the follicle in the ovary, causing the fully developed follicle to release itssecondary oocyte. The secondary oocyte promptly matures into an ootid and then becomes a mature ovum. The mature ovum has a diameter of about 0.2 mm.

Which of the two ovaries—left or right—ovulates appears essentially random; no known left and right co-ordination exists. Occasionally, both ovaries will release an egg; if both eggs are fertilized, the result is fraternal twins.

After being released from the ovary, the egg is swept into the fallopian tube by the fimbria, which is a fringe of tissue at the end of each fallopian tube. After about a day, an unfertilized egg will disintegrate or dissolve in the fallopian tube.

Fertilization by a spermatozoon, when it occurs, usually takes place in the ampulla, the widest section of the fallopian tubes. A fertilized egg immediately begins the process of embryogenesis, or development. The developing embryo takes about three days to reach the uterus and another three days to implant into the endometrium. It has usually reached the blastocyst stage at the time of implantation.

In some women, ovulation features a characteristic pain called *mittelschmerz* (German term meaning *middle pain*). The sudden change in hormones at the time of ovulation sometimes also causes light mid-cycle blood flow.

Luteal phase

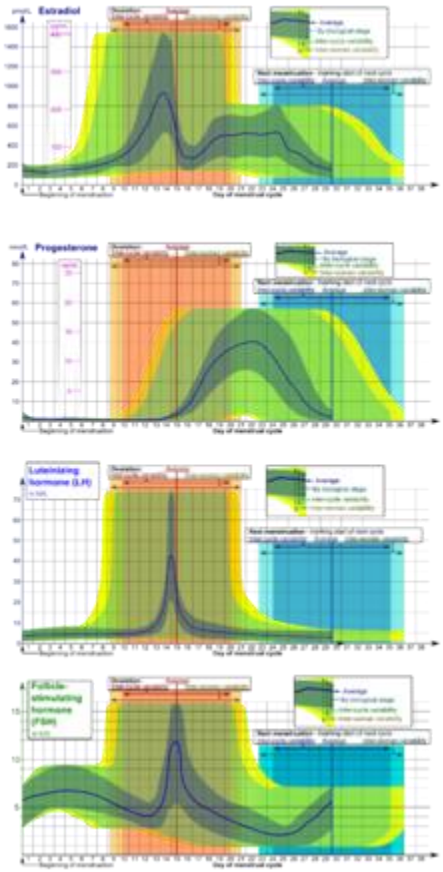
The luteal phase is the final phase of the ovarian cycle and it corresponds to the secretory phase of the uterine cycle. During the luteal phase, the pituitary hormones FSH and LH cause the remaining parts of the dominant follicle to transform into the corpus luteum, which produces progesterone. The increased progesterone in the adrenals starts to induce the production of estrogen. The hormones produced by the corpus luteum also suppress production of the FSH and LH that the corpus luteum needs to maintain itself. Consequently, the level of FSH and LH fall quickly over time, and the corpus luteum subsequently atrophies. Falling levels of progesterone trigger menstruation and the beginning of the next cycle. From the time of ovulation until progesterone withdrawal has caused menstruation to begin, the process typically takes about two weeks, with 14 days considered normal. For an individual woman, the follicular phase often varies in length from cycle to cycle; by contrast, the length of her luteal phase will be fairly consistent from cycle to cycle.

The loss of the corpus luteum is prevented by fertilization of the egg. The syncytiotrophoblast, which is the outer layer of the resulting embryo-containing structure (the blastocyst) and later also becomes the outer layer of the placenta, produces human chorionic gonadotropin (hCG), which is very similar to LH and which preserves the corpus luteum. The corpus luteum can then continue to secrete progesterone to maintain the new pregnancy. Most pregnancy tests look for the presence of hCG.

Uterine cycle

Menstruation

Menstruation (also called menstrual bleeding, menses, catamenia or a period) is the first phase of the uterine cycle. The flow of menses normally serves as a sign that a woman has not become pregnant. (However, this cannot be taken as certainty, as a number of factors can cause bleeding during pregnancy; some factors are specific to early pregnancy, and some can cause heavy flow.)



Levels of estradiol (the main estrogen), progesterone, luteinizing hormone, and follicle-stimulating hormone during the menstrual cycle, taking inter-cycle and inter-woman variability into account.

Eumenorrhea denotes normal, regular menstruation that lasts for a few days (usually 3 to 5 days, but anywhere from 2 to 7 days is considered normal) The average blood loss during menstruation is 35 milliliters with 10–80 ml considered normal. Women who experience Menorrhagia are

more susceptible to iron deficiency than the average person.
An enzyme called plasmin inhibits clotting in the menstrual fluid.

Painful cramping in the abdomen, back, or upper thighs is common during the first few days of menstruation. Severe uterine pain during menstruation is known as dysmenorrhea, and it is most common among adolescents and younger women (affecting about 67.2% of adolescent females). When menstruation begins, symptoms of premenstrual syndrome (PMS) such as breast tenderness and irritability generally decrease. Many sanitary products are marketed to women for use during their menstruation.

Proliferative phase

The proliferative phase is the second phase of the uterine cycle when estrogen causes the lining of the uterus to grow, or proliferate, during this time. As they mature, the ovarian follicles secrete increasing amounts of estradiol, and estrogen. The estrogens initiate the formation of a new layer of endometrium in the uterus, histologically identified as the proliferative endometrium. The estrogen also stimulates crypts in the cervix to produce fertile cervical mucus, which may be noticed by women practicing fertility awareness.

Secretory phase

The secretory phase is the final phase of the uterine cycle and it corresponds to the luteal phase of the ovarian cycle. During the secretory phase, the corpus luteum produces progesterone, which plays a vital role in making the endometrium receptive to implantation of the blastocyst and supportive of the early pregnancy, by increasing blood flow and uterine secretions and reducing the contractility of the smooth muscle in the uterus; it also has the side effect of raising the woman's basal body temperature.

The list of types of Uterus conditions mentioned in various sources includes:

- Uterus cancer
- Uterine fibroids

- Hysterectomy
- Uterine polyp
- Uterine prolapse
- Pregnancy
- Breech pregnancy
- Caesarian Section
- Ectopic pregnancy
- Childbirth
- Menstruation
- Dysfunctional Uterine Bleeding
- Pelvic Inflammatory Disease
- Retroverted uterus
- Adenomyosis
- Endometrial conditions
    - Endometrial Cancer
    - Endometriosis
    - Autoimmune Endometriosis
    - Endometrial hyperplasia
    - Endometritis
- Cervix conditions
- Abruptio Placentae

- Cervical polyps
- Female infertility
- Female-only conditions
- Gynaecological conditions
- Menstrual conditions
- Miscarriage
- Obstetrical conditions
- Pregnancy-related conditions
- Premature Birth
- Premenstrual syndrome
- Intrauterine Growth Retardation
- Uterine sarcoma
- Uterine Cancer
- IBS associated with endometriosis
- Amenorrhea
- Menopause
- Primary amenorrhea
- Hypothalamic amenorrhea
- Dysmenorrhea
- Primary Dysmenorrhea
- Secondary Dysmenorrhea

- Menarche
- Perimenopause
- Uterine leiomyoma
- Anovulation
- Metrorrhagia
- Oligomenorrhea
- Uterine Hemorrhage
- Hydatidiform mole
- Trophoblastic Cancer
- Endometrial stromal sarcoma
- Adenosarcoma of the uterus
- Intrauterine infections
- Menorrhagia
- Menstrual cramps
- Decreased menses
- Neuroendocrine carcinoma of the cervix
- Malignant mixed Mullerian tumor
- Myoma (fibroid)
- Uterine compression syndrome
- Mesodermal defects lower type
- MRKH syndrome

- Hand-foot-uterus syndrome
- Rokitansky-Kuster-Hauser syndrome
- Rokitansky sequence
- Asherman Syndrome
- Tubal ligation syndrome
- Hypomelia -- mullerian duct anomalies
- Chapple syndrome
- Michels-Caskey syndrome
- Stampe-Sorensen syndrome
- Double uterus-hemivagina-renal agenesis
- Czeizel syndrome
- Yusho disease[16]

DYSFUNCTIONAL UTERINE BLEEDING

DEFINITIONS:

Dysfunctional Uterine Bleeding (DUB): excessive, prolonged, or irregular uterine bleeding in a Reproductive aged woman who lacks pelvic organ disease or a systemic disorder.

Menorrhagia: excessive uterine bleeding occurring at the regular intervals of menstruation, the period of flow being greater than usual in duration

Metrorrhagia: uterine bleeding of a normal amount, occurring at completely irregular intervals

Menometrorrhagia: excessive uterine bleeding occurring both during the menses and at Irregular intervals

Oligomenorrhoea: markedly diminished menstrual flow; relative amenorrhea; infrequent Menstruation.

Hypermenorrhoea: excessive uterine bleeding occurring at regular intervals, the period of flow being of usual duration

Hypomenorrhoea: uterine bleeding of less than normal amount occurring at regular intervals, the

period of flow being of the same or less than usual duration

GENERAL CONSIDERATIONS

10-15% of patients referred to gynecologists are treated for DUB. Half of these are

Pre- menopausal; 20% are pre-menarchal and the rest are in the reproductive age group

Most cases of DUB are associated with ovulatory dysfunction.

THE NORMAL MENSTRUAL CYCLE

• The normal menstrual cycle is a result of complex interaction between hypothalamus,

anterior pituitary, ovary and endometrium.

• Maturation of the endometrium is relatively uncomplicated (compared with the maturation of the oocyte) and is solely dependent upon two hormones, estrogen and progesterone.

• The first half of the menstrual cycle (proliferative phase) is estrogen dependent resulting in growth of the endometrium from 1 to 5 mm at the time of ovulation.

• The second half of the menstrual cycle (secretory phase) is progesterone dominant.

Progesterone halts the growth of the endometrium and stimulates secretory activity in the endometrium.

• Menstruation occurs when both progesterone and estrogen levels fall after the failure of conception. Synchronous shedding of the endometrial lining occurs.

• Note: Random breakdown of the endometrial lining (DUB) does not occur when the endometrium has been adequately primed with estrogen and stabilized with progesterone.

Normal menses:

- Last 2-7 days
- Blood loss ranges from 25-70 ml (average 30-35ml)
- Mean cycle length is 29 days (range 21-40 days)

EVALUATION OF ABNORMAL UTERINE BLEEDING

1. It is nearly impossible to estimate blood loss from history. Clotting or bleeding > 7 days

suggest substantial blood loss but the only objective way to quantitate blood loss is by checking CBC. Hct < 30 implies significant blood loss.

Bleeding at a rate of soaking a tampon or pad in an hour for at least 2 consecutive hours

implies PROFUSE bleeding. Orthostatic hypotension implies hemodynamic instability.

2. The coloration of the blood can often give clues to the etiology of the abnormal bleeding. Brown or prune-colored discharge superimposed upon regular red menstrual bleeding is most commonly caused by an obstructed genital tract. It may be heavy, initially continuous, and most often will be noted immediately after a menstrual period. Endometriosis also causes brown discharge but this is usually premenstrual. Cervical endometriosis and stenosis trap blood within the endometrial cavity. As the cervix dilates late in the cycle, the trapped old blood and by-products are allowed to empty from the cavity.

3. Next decide if the bleeding is ovulatory or an ovulatory.

4. To determine if the woman is ovulating, it may help to do Basal Body Temperature determinations (ovulation should increase body temperature by half a degree or so during the last 2 weeks of the cycle). Perform ovulation predictor tests measure progesterone levels (>9.5 nmol/li or > 3 ng/ml is evidence that ovulation has taken place), Endometrial biopsy showing secretory changes confirms ovulation

OVULATORY BLEEDING:

Bleeding which occurs at regular intervals and is preceded by premenstrual symptoms,

Breast tenderness

Water weight gain

Mood swings

Abdominal cramping

ANOVULATORY BLEEDING:

Prolonged bleeding occurring at irregular intervals followed by months of amenorrhea.

OVULATORY DUB

Ovulatory bleeding is more likely to be associated with an anatomic or organic cause such as fibroids, infections, lacerations, or polyps.

• Pregnancy-related causes of DUB:
• Ectopic pregnancy
• Spontaneous abortion
• Incomplete abortion
• Threatened abortion
• Retained products of conception
• Placental products
• Trauma at delivery
• Trophoblastic disease
• Inflammatory causes of DUB:

• Endometritis: prolongation of normally timed menses or irregular spotting

• Cervicitis: prolongation of normally timed menses or irregular spotting

• Vaginitis: infection with Trichomonas can cause persistent spotting superimposed upon normal cyclic bleeding

• IUD: prolonged heavy bleeding during normally timed menses

• Foreign body: retained tampon or diaphragm results in irregular spotting usually of oldblood

• Lacerations

• Systemic Diseases which cause DUB:

• Blood dyscrasias (ITP, Von Willebrand's): Pts with Von Willebrand's may have normal PT, PTT but abnormal bleeding times. Von Willebrand's disease is the most common inherited clotting disorder that can present at menarche as severe menorrhagia.

• Malnutrition

• Anticoagulant therapy

• Thyroid disease

• Tumors which cause DUB:

• Fibroids: submucous myomata are notorious for causing prolonged heavy bleeding; common in older women and in African Americans. Submucous fibroids are not obvious on exam (try endovaginal ultrasound)

• Adenomyosis

• Endometriosis: most commonly presents with luteal phase spotting characterized by darkbrown or prune colored discharge

• Polyps

o Cervical: often post-coital spotting

o Uterine: may present with prolonged trail-off spotting at the conclusion of a normally timed menses or persistent spotting throughout the cycle

• Endometrial hyperplasia

• Cervical hemangiomas: very heavy bleeding, often after trauma

• Cancer of the cervix, endometrium, or fallopian tubes

ANOVULATORY DUB

• Anovulatory DUB can be secondary to chronic unopposed estrogen or estrogen withdrawal in chronic unopposed estrogen states, the endometrium is continuously stimulated

by estrogen which causes proliferation without the stabilization from progesterone. The endometrium sloughs in an irregular and incomplete manner.

Areas that have shed begin to heal under the influence of continuous estrogen.

This random, non-uniform shedding/healing can cause profuse and prolonged bleeding.

In estrogen withdrawal states, estrogen levels may rise but insufficiently to trigger an LH surge. Bleeding occurs when estrogen levels fall.

• There are both physiologic and pathologic causes of anovulatory bleeding.

PHYSIOLOGICAL CAUSES:

1. Puberty: The first cycles after menarche are anovulatory and the bleeding is secondary to

estrogen withdrawal. This bleeding is usually light to moderate and occurs at 22-45 days intervals.

2. Perimenopausal: The peak estrogen level attained as a woman nears menopause will not be sufficient to trigger an LH surge and ovulation fails. Bleeding occurs because of estrogen withdrawal.

PATHOLOGIC CAUSES:

Dysfunction can occur at any level of the hypothalamic-pituitaryovarian axis.

1. Ovarian Failure: can be premature and associated with an autoimmune process

2. Hypothalamic amenorrhea: can be from weight loss, emotional stress or chronic illness

3. Polycystic Ovary Syndrome: associated with obesity, hirsutism, infertility and anovulatory DUB

4. Other causes: hyperprolactinemia

INDIVIDUALIZED APPROACH TO TREATMENT OF DUB

Adolescent:

1. Anovulatory bleeding after menarche is common.
2. If the bleeding is not significant, then observation alone is sufficient.
3. Rule out pregnancy, even in the adolescent who denies sexual activity.

4. Adolescents who present with heavy vaginal bleeding after several months of amenorrhea are best treated with OC's. Treatment can be stopped after 3-6months to see if a normal menstrual cycle has been established.

Acute Anovulation:

1. Most women with normal menstrual cycles will occasionally have an anovulatory cycle that can result in protracted bleeding.
2. Rule out pregnancy first and then treat with a single course of a progestational agent such as

   10mg Provera for 5-10 d. If the bleeding does not resolve in 48-72 hours, then rule out another cause of the bleeding

Chronic Anovulation:

1. Monthly administration of a progestational agent will result in regular endometrial shedding which will protect against endometrial cancer.
2. A 12 day course of med roxy progesterone at 10 mg/d should be adequate.
3. If occasional ovulation cannot be ruled out and the woman does not desire pregnancy, then oral contraceptives are a better choice.
4. Any woman with at least a 1 year history of anovulation should be referred to a gynecologist for endometrial biopsy

Perimenopausal Women:

1. Many perimenopausal women fluctuate between ovulatory and anovulatory cycles.
2. Low dose oral contraceptives can be used to provide a monthly withdrawal bleed and provide contraception as well.
3. The FDA has approved use of oral contraceptives in women up to the time of menopause as long as there is no contraindication such as smoking, HTN, clotting disorders or hyperlipidemia.
4. To determine that a woman has entered menopause, an FSH > 40 on day 6 or 7 of the placebo pills confirms ovarian failure and the patient can then be switched to hormone replacement therapy[18&19].

MATERIALS AND METHODS

MATERIALS AND METHODS

STUDY DESIGN

Study Type : An Open Clinical Trial

Study Place : Ayothidass Pandithar Hospital (OPD),
National Institute Of Siddha,
Tambaram Sanatorium,
Chennai-47.

Study Period : 12 Months

Sample Size : 40 Patients(Female).

TREATMENT

Name Of the drug : Perumbadukku Pittu
Dosage : 30gms/ four times a day after food
Duration : 6 days for 2 consecutive menstrual cycle
(Follow Up For 3 Months)
Vehicle : Butter
Indication : Natpatta Perumbadu
Pathiyam : Icha Pathiyam
Book Rf : Athmaratcha Mirtham Ennumvaithiya Sarasangiradam [2]
Author Name : Dr. Kandasamy Mudhaliyar
Edition : Sep 2011 (1st)

:

STANDARD OPERATING PROCEDURE FOR PERUMPADUKKU PITTU

SOURCE OF RAW DRUGS The required raw drugs were collected from kaveri farm virudhachalam. The raw drugs was b authenticated by the Asst. Professor Medicinal botany in NIS Chennai. The raw drugs was purified and the medicine will be prepared as per SOP in Gunapadam laboratory of National Institute of siddha.

REQUIRED RAW DRUGS:

Bark of *Ziziphus mauritiania,Lam (Ilandapattai)* - 1 palam *(***35gms)**

Bark of *Lannea coromandelia(houtt)Merr (Othiyampattai)* - 1 palam *(***35gms)**

Bark of *Syzygium cumini,linn (Naavalpattai)* - 1 palam *(***35gms)**

Bark of *Ficus racemosa.linn(Athipattai)* - 1 palam *(***35gms)**

Bark of *Ficus religiosa.linn(Arasapattai)* - 1 palam *(***35gms)**

Bark of *Mangifera indica.linn(Mampattai)* - 1 palam *(***35gms)**

Bark of *Acacia nilotica.linn(Velampattai)* - 1 palam *(***35gms)**

Raw rice powder(pacharasi maavu) - 7 pala*m (***245gms)**

Palm jaggery (panai vellam) - 7 palam **(245gms)**

PURIFICATION OF RAW DRUGS

1. The ingredients from 1 to 7 will be purified by scrubbing the outer skin as per the siddha text Marundu Sei Iyalum kalaiyum.[5]

2.Cleaning and drying of raw rice powder

METHOD OF PREPARATION:

Step 1 :

The ingredient from 1 to 7 was pulverized and filtered.

step 2 :

Add equal amount of raw rice powder to the above pulverized powder and then add the equal amount of palm jaggery.

step 3 :

The above mixture was subjected to baking procedure.

Drug Storage:

The prepared drug will be stored in clean and dry air tight glass container.

Dispensing:

The medicine Perumpadukku Pittu (120gms) was given to the patients in air tight glass container.

SUBJECT SELECTION:

Patients reporting at OPD of Maruthuvam with the symptoms of inclusion criteria was subjected to screening test and documented using screening proforma.

Inclusion criteria:

Age: 16-45 years

Patient having the symptoms of increased menstrual bleeding.

Blood clots seen in the mensus bleeding

Patient willing to undergo routine blood investigation.

Patient willing to participate in trial and signing in consent form.

Usg Abdomen(to rule out the fibroid etc)

Exclusion criteria:

Hypertension

Diabetes mellitus

Cardiac disease

Renal disease

Pregnancy and lactation

Thyroid dysfunction

Recent hormone therapy (past one year)

Fibroid uterus

Endometriosis

Adenomyosis

Cancer uterus

Endometritis

Withdrawal criteria:

Intolerance to the drug and development of adverse reactions during the drug trial.

Poor patient compliance & defaulters.

Patients turned unwilling to continue in the course of clinical trial

Patient will not take medication regularly

when increase the severity of the symptoms i.e excess menstrual bleeding above 90 ml

.

TEST AND ASSESSMENTS:

1.Clinical assessment

2.Siddha assessment

3.Routine Investigations

4.Special Investigation

14.1CLINICAL ASSESSMENT:

Bleeding or spotting from the vagina between periods.

Periods that occur less than 28 days apart or more than 35 days.

Time changes between every menstrual periods.

Excessive bleeding (such as passing large clots, needing to change protection during the night, soaking through a sanitary pad or tampon every hour for 2 - 3 hours in a row)

Bleeding lasts for more than 7 days

Hot flashes

Mood swings

Tenderness and dryness of the vagina

Tired and fatigue

SIDDHA ASSESSMENT

Thinai (Living Place)

Kurinchi (Hill Areas)

Mullai (Forest)

Marutham (Fertile Land)

Neithal (Costal land)

Paalai (Desert)

Paruvakaalam (Season):

Kaar Kaalam

Koothir Kaalam

Munpani Kaalam

Pinpani Kaalam

Elavenil Kaalam

Muthuvenil Kaalam

Poripulankal:

Mei (Skin)

Vaai (Tongue)

Kan (Eye)

Mooku (Nose)

Sevi (Ear)

Gnanenthiriyam And Kanmenthiriyam:

Vaai (Buccal Cavity)

Kaal (Lower Limb)

Kai (Upper Limb)

Eruvaai (Anorectal Region)

Karuvaai (Uro- Genital Region)

Ezhu Udal Kattugal:

Saram

Senneer

Uoon

Kozhuppu

Enbu

Moolai

Sukkilam/Suronitham

Enn Vagai Thervu(Eight Diagnostic Methods)

Naadi

Sparisam

Naa

Niram

Mozhi

Vizhi

Malam

Moothiram

Neerkuri

Neikuri

Routine Investigations

Hematology :

Hb (gms/dl)

PCV

MCV

MCHC

MCV

Bleeding Time

Clotting Time

Smear Study

Total RBC (million/Cu.mm)

Total WBC (cubic mm)

Differential Count : (%)

Polymorphs

Lymphocytes

Monocytes

Esinophils

Basophils

ESR(mm/Hr)

Blood Sugar Level - Fasting (mg/dl)

Post Prandial (mg/dl)

Random (mg/dl)

SPECIFIC INVESTIGATIONS

PBAC SCORE[7]

[PICTORIAL BLEEDING ASSESSMENT CHART]

DATA COLLECTION FORMS:

Required Information was collected from each patient by using the following forms.

Forms:

FORM I : Screening & Selection Proforma

FORM Il : Case Record Form

FORM Ill : Laboratory Investigation Form

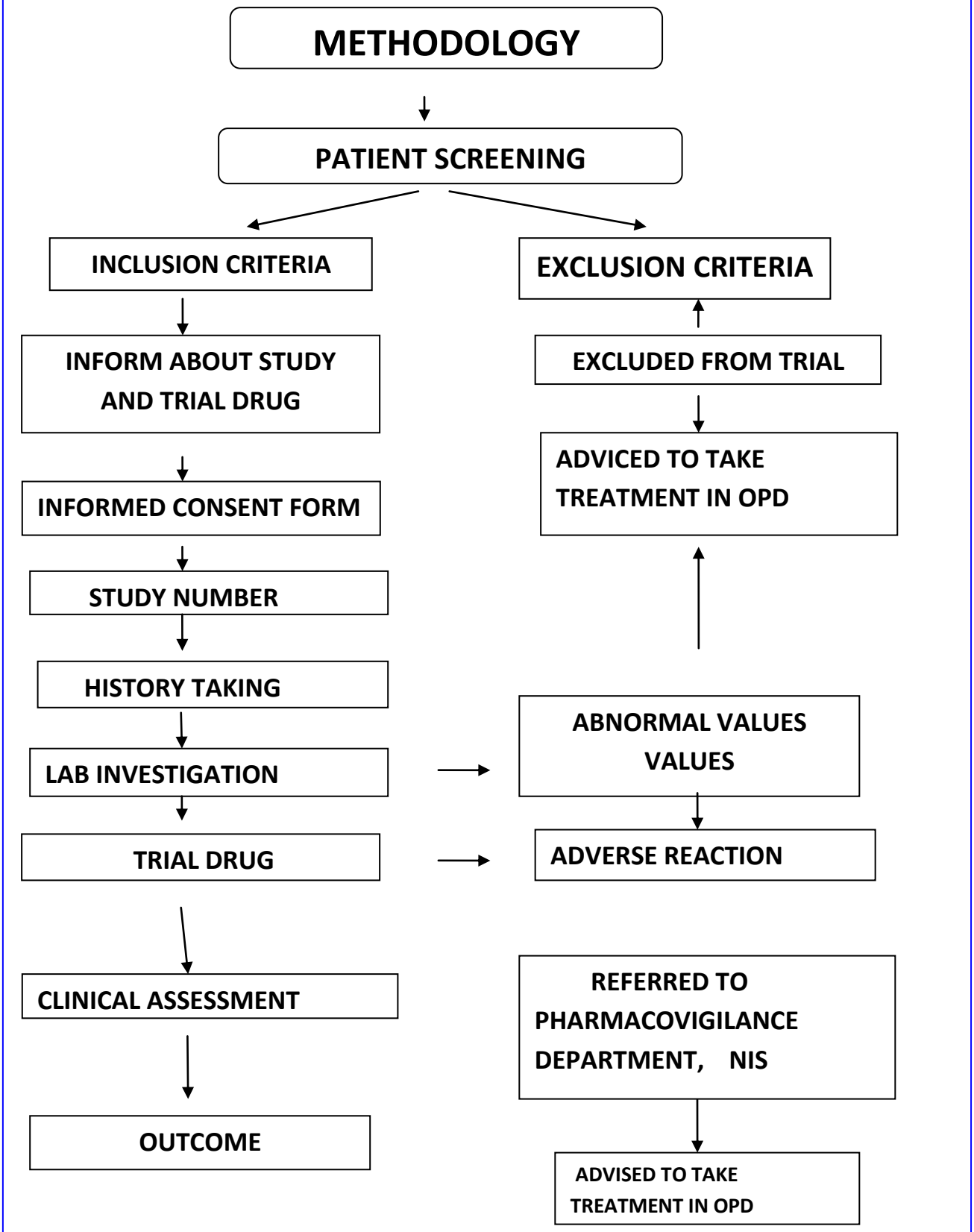
FORM IV : Drug Compliance Form

FORM V : Patient Information Sheet

FORM VI : Informed Consent Form

FORM VII : Withdrawal Form/ Adverse Reaction form, (Pharmacovigilence Form)

FORM VIII : Dietary Advice Form


METHODOLOGY
PATIENT SCREENING
INCLUSION CRITERIA
EXCLUSION CRITERIA
INFORM ABOUT STUDY AND TRIAL DRUG
EXCLUDED FROM TRIAL
INFORMED CONSENT FORM
ADVICED TO TAKE TREATMENT IN OPD
STUDY NUMBER
HISTORY TAKING
ABNORMAL VALUES VALUES
LAB INVESTIGATION
TRIAL DRUG
ADVERSE REACTION
CLINICAL ASSESSMENT
REFERRED TO PHARMACOVIGILANCE DEPARTMENT, NIS
OUTCOME
ADVISED TO TAKE TREATMENT IN OPD

STUDY ENROLMENT:

Patient reporting at the NIS, OPD with clinical features of loss of appetite, inflammation of vagina, pallor of whole body, upper & lower limb pain, yellow colored decaying odor like bleeding, sometimes dark black colored blood clots had been chosen for enrolment based on the inclusion criteria. The enrolled patients were informed about the study trial drug, possible outcomes and the objectives of the study in their own language and terms understandable to them and the informed consent was obtained from them in the consent form.

CONDUCT OF THE STUDY

On the first day onwards the trial drug perumpaduku pittu was given for 3 days.The trial drug was given by the investigator in the OP Department of Maruthuvam, NIS, Chennai. The patients was asked to have a regular treatment in the OP department once in 3 days. In every visit the clinical assessment was recorded in the prescribed proforma (form no:II). The laboratory investigation was done before and after treatment and recorded in the prescribed format (form no: iii). At the end of the trial the patients was advised to come for follow up for 3 months for observation.

DATA MANAGEMENT:

After enrolling the patient in the study, a separate file for each patient was opened and all forms was filed in the file. Study no. and patient no. was entered on the top of file for easy identification. Whenever the study patient visits OPD during the study period, the respective patient's file was taken and necessary recordings was made at the case record form or other suitable forms.

The screening forms was filed separately.

The data recordings was monitored for completion by guide (HOD, Dept. of Maruthuvam), SRO (statistics) and the adverse event was monitored by the members of the pharmacovigilance department of NIS. All forms was further scrutinized in presence of investigator by Senior Research Officer (statistics) for logical errors and incompleteness of data to avoid any bias. No modification in the results is permitted for unbiased reports.

statystical analysis :

All collected data was entered into computer using ms access / ms excel software by the investigator. The data was analyzed using stata software under the guidance of SRO(stat), NIS. The level of significance will be 0.05 descriptive analysis was made and necessary tables/graphs generated to understand the profile of the patients included in the study. Student 't' test and chi-square test are proposed to be performed for quantitative and qualitative data.

OUTCOME OF TREATMENT

PRIMARY OUTCOME:

It was assessed by the reduction of Menstrual bleeding before and after Treatment.

PBAC SCORE[PICTORIAL BLOOD ASSESSEENT CHART SCORE]

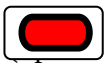
[Ref:Leading the way experimental and clinical research in haematology,

Author:Hannenore Rott, Guenther Kappert,Manuela siebert,

Blood 2013 122:4772]

PBAC SCORE

Month:----------

	Pads			Tampons			Clots		Flooding	Score
Date	Light 	Medium  Each)	Heavy  Each	Light 	Medium  5ptseach	Heavy  Ea	5 Cent Size (1 Pt Each)	50 Cent Size (5 Pts Each)	1 Pt Each Episode	

1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
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26										
27										
28										
29										
30										
31										
									Total	

Each Row Represents A Day Of The Month Count The Number Of Sanitary Pads And/Or Tampons You Use Each Day (24 Hour Period). Calculate A Score For Each Day, Then Add Up The Score At The End Of The Month.

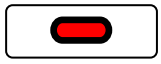
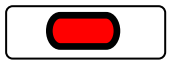
Bleeding Between Periods - If You Also Experienced Bleeding Between Periods That Required Sanitary Protection Please Record This On The Relevant Days.

Clots – If You Pass Clots, Please Indicate This On The Relevant Days And The Approximate Size (Ie. Closer To An Australian 5 Cent Or 50 Cent Piece).

Flooding – If You Experience Any Episodes Of ‘Flooding’/Overflowing/Staining Of Clothing/Underwear Please Indicate The Number Of Episodes On The Relevant Days.

Double Protection – If You Have Used Both A Pad And Tampon Simultaneously And Both Sanitary Items Were Stained With Blood Don't Forget To Include Both Sanitary Items On The PBAC.

PBAC Scoring System

Pads		
1 Point	For Each Lightly Stained Pad	
5 Points	For Each Moderately Stained Pad	
20 Points	For Each Completely Saturated Pad	
Tampons		
1 Point	For Each Lightly Stained Tampon	
5 Points	For Each Moderately Stained Tampon	
10 Points	For Each Completely Saturated Tampon	

Clots/Flooding		
1 Point	N 5 Cent Coin) For Each Small Clot (Australia	
5 Points	N 50 Cent Coin) For Each Large Clot (Australia	
5 Points	For Each Episode Of Flooding	

SECONDARY OUTCOME :

Reduction of other symptoms.

ADVERSE EFFECT AND SERIOUS EFFECT MANAGEMENT:

If the trial patient develops any adverse reactions the patient was referred to the pharmacovigilance department of NIS and documented. For any adverse effect the investigator took the step for further & proper management in the OPD.

Ethical issues:

1. Informed consent will be obtained from the patients after explaining about the clinical trial in an understandable language.
2. After the consent of the patient (through consent form) they will be enrolled in the study.
3. Treatment will be provided free of cost
4. No other medicines will be used except the trial drug
5. Usg- abdomen will be taken in the nabl certified laboratories and charges will be borne by the patient.
6. To prevent any infection, while collecting blood sample from the patient, only
7. Disposable syringes, disposable gloves, with proper sterilization of lab equipments will be used.
8. The data collected from the patient will be kept confidentially. The patient will be informed about the diagnosis, treatment and follow up.
9. The patients who are excluded (as per the exclusion criteria) are given proper treatment with full care at OPD.
10. In conditions of treatment failure, adverse reactions patients will be given alternative treatment at the OPD with full care through the end.

OBSERVATION AND RESULTS

OBSERVATION AND RESULTS

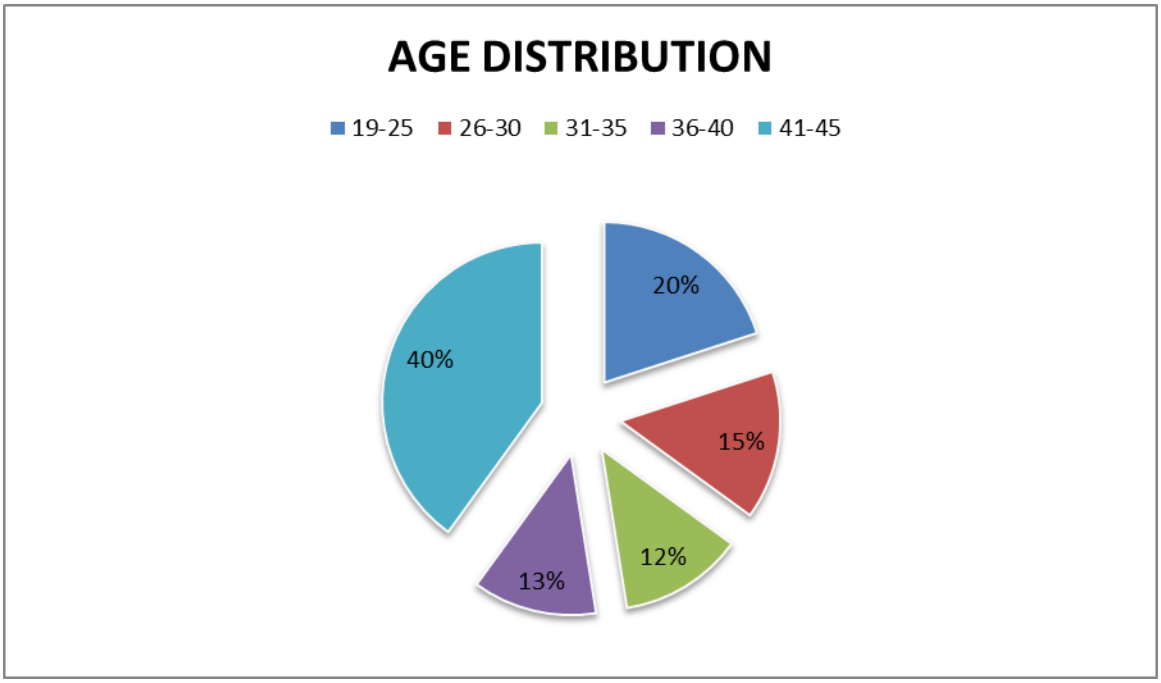
For the clinical study 40 outpatients were selected and treated in PG Maruthuvam Department , Ayothidoss Pandithar Hospital, National Institute Siddha,Chennai-47.

Results were observed with respect to following criteria.

1. Age distribution
2. Occupational status
3. Marital status
4. Food habits
5. Family history
6. Thinai
7. Paruvakaalam
8. Yakkai
9. Kosangal
10. Mukkutram
11. Ezhu Udal Thathukal
12. Enn Vagai Thervu
13. Chronicity of illness
14. Clinical Manifestation
15. Results

1.AGE DISTRIBUTION

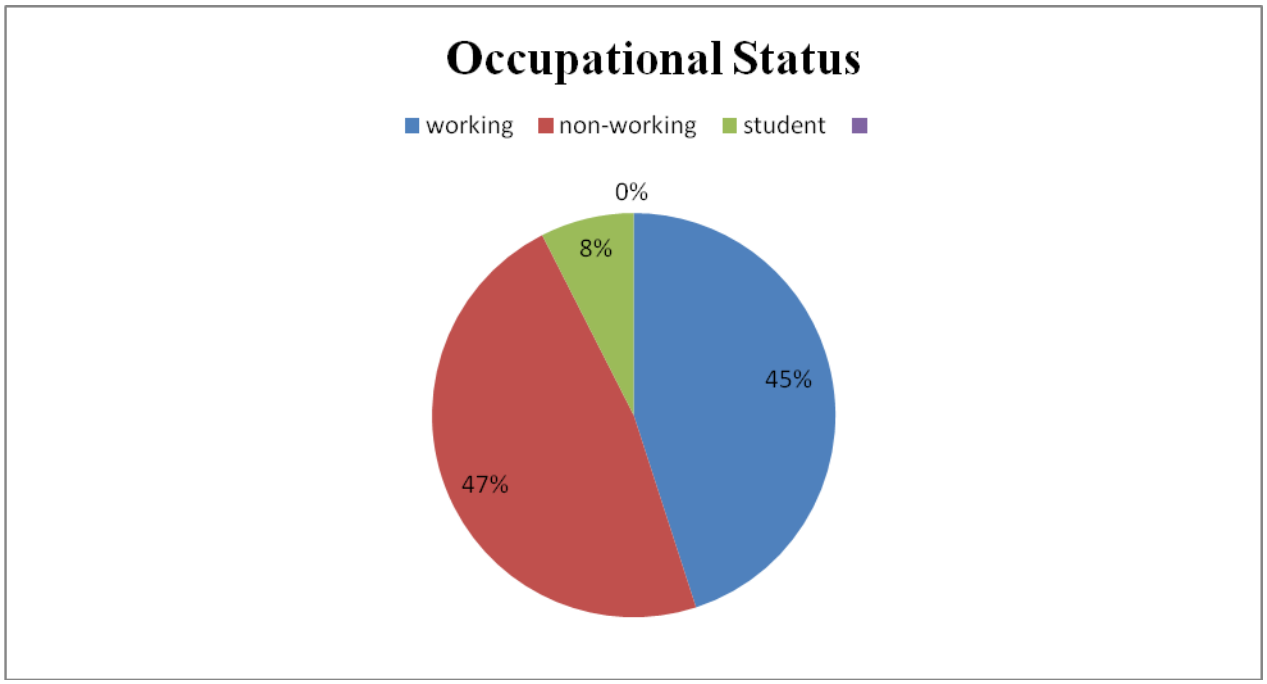
AGE(years)	NO. OF CASES	PERCENTAGE
19 -25	8	20%
26-30	6	15%
31-35	5	12%
36-40	5	13%
41-45	16	40%
TOTAL	40	100%



INFERENCE: Among 40 cases, 8 cases(20%) were in age group 19-25, 6 cases(15%) were in age group 26-30,5 cases(13%) were in age group 31-35, 5 cases(12%) were in age group 36-40, 16 cases(40%) were in age group 41-45.

2.OCCUPATIONAL STATUS

OCCUPATIONAL STATUS	NO. OF CASES	PERCENTAGE
WORKING	18	45
NON-WORKNG	19	47
STUDENT	3	8
TOTAL	40	100

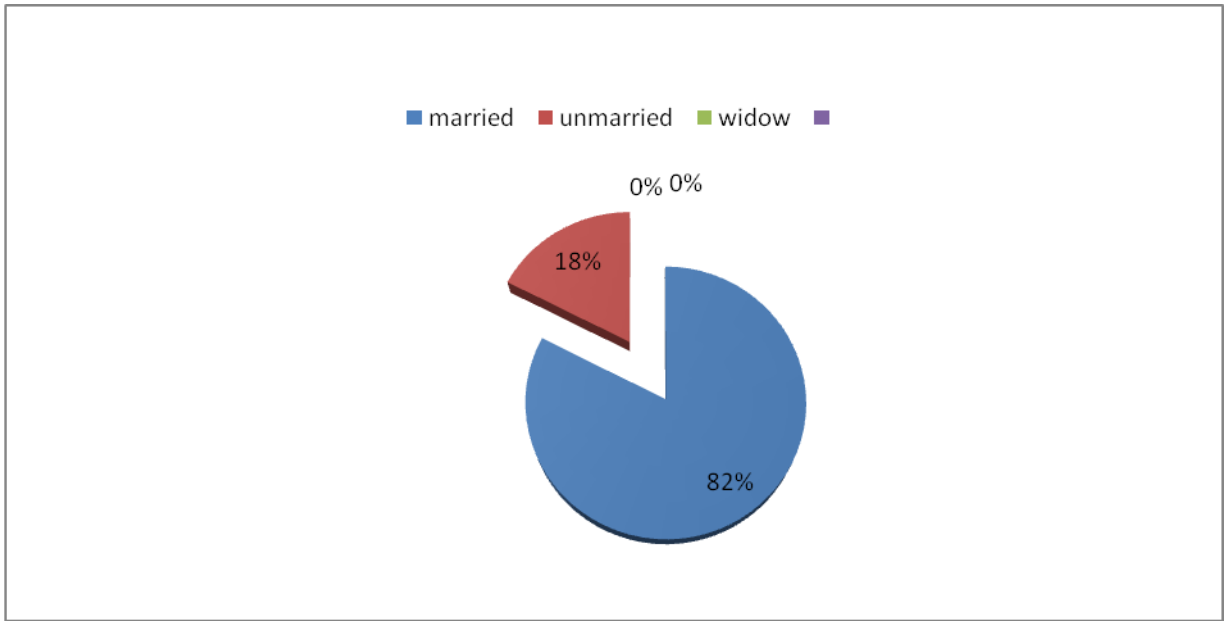


INFERENCE: Out of 40 cases, 18(45%)working people, 19(47%) non-working people, 3 (8%)are student

3.MARITAL STATUS

MARITAL STATUS	NO. OF CASES
MARRIED	33
UNMARRIED	7
WIDOW	0
TOTAL	40

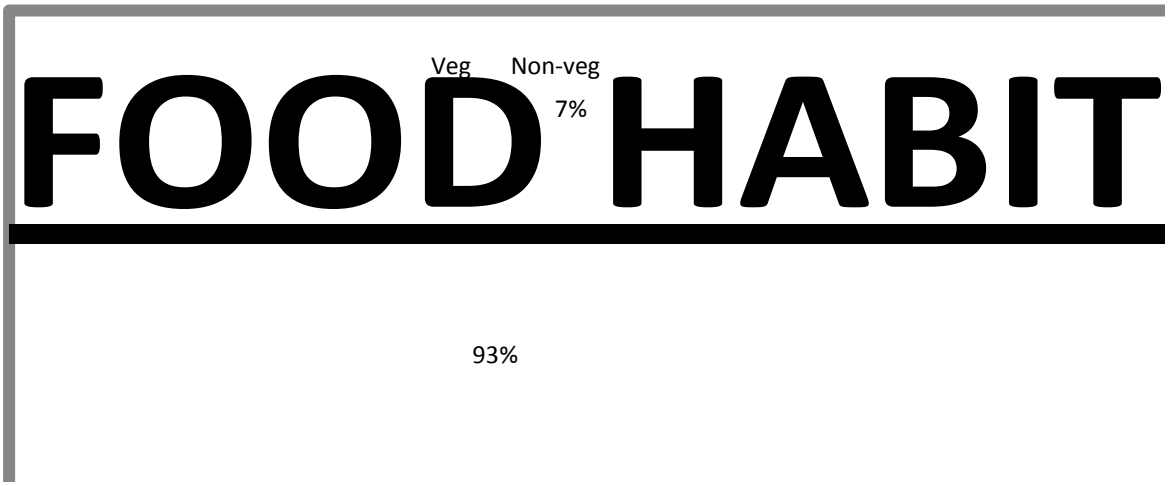
MARITAL STATUS



INFERENCE: Out of 40 cases, 33(82%) were married, 7(18%) were unmarried.

4.FOOD HABITS

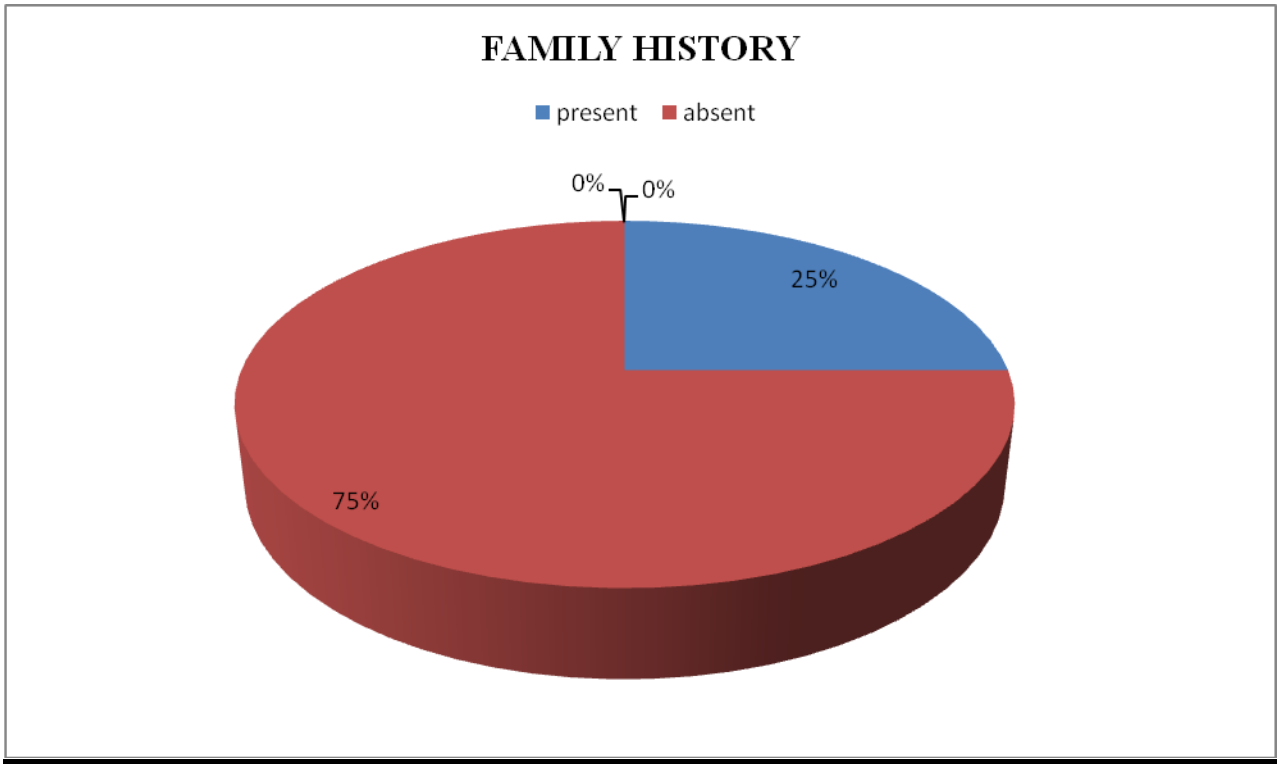
FOOD HABITS	NO. OF CASES	PERCENTAGE
Vegetarian	3	7%
Non-vegetarian	37	93%
Total	40	100%



INFERENCE: Non Vegetarian are more prone to Pitha Perumpadu than Vegetarian.

5.FAMILY HISTORY

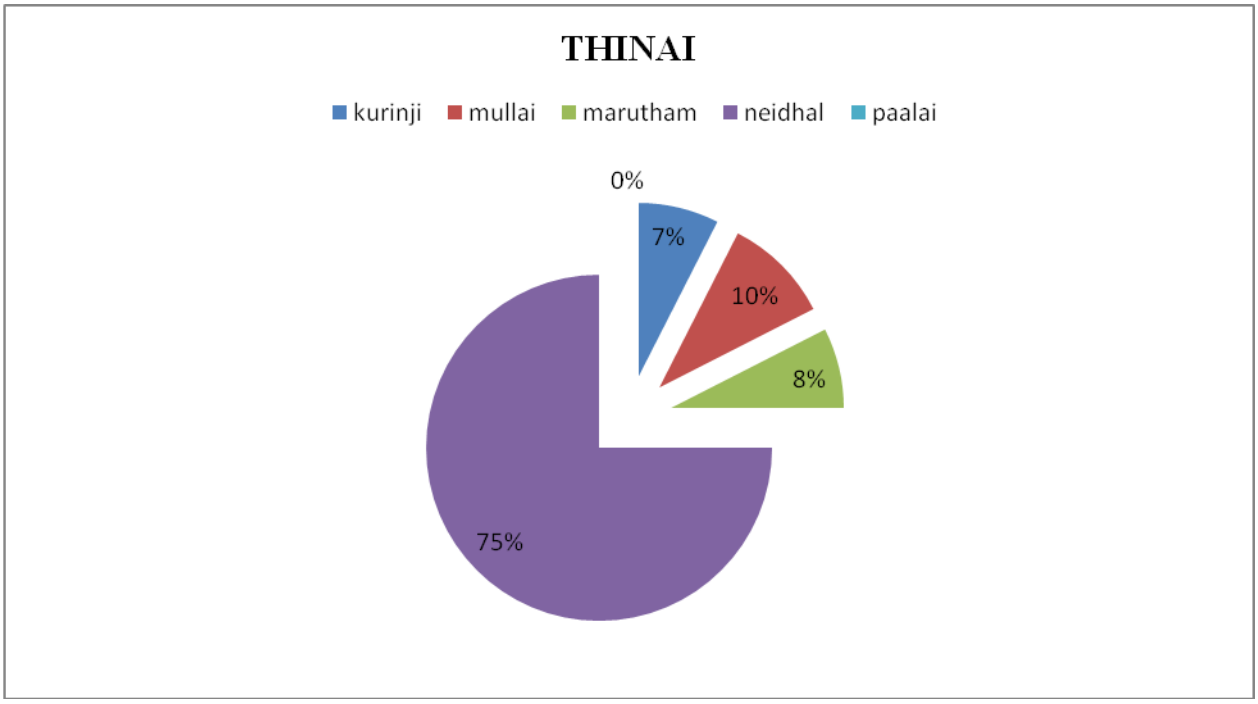
FAMILY HISTORY	NO. OF CASES	PERCENTAGE
PRESENT	10	25%
ABSENT	30	75%
TOTAL	40	100%



INFERENCE: Out of 40 cases, 75% of cases had no positive family history for Dysfunctional Uterine bleeding, 25% of cases related with family history.

6.THINAI

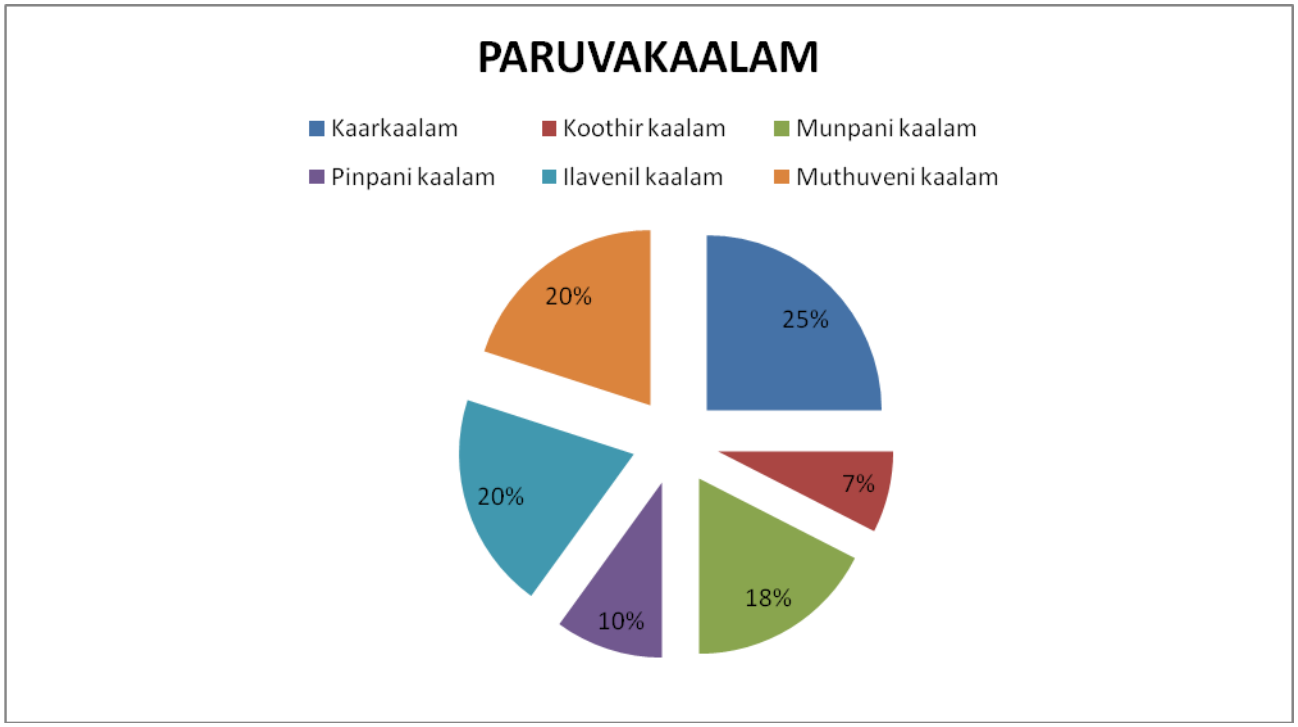
THINAI (LIVING PLACE)	NO. OF CASES	PERCENTAGE
KURINJI	3	7%
MULLAI	4	10%
MARUTHAM	3	8%
NEIDHAL	30	75%
PAALAI	0	0%



INFERENCE: Out of 40 cases Pitha Perumbadu affects the people more in the Neidhal 75%,then Mullai 10%, 8% in Marutham , and 7% in Kurinji.

7. **PARUVAKAALAM**

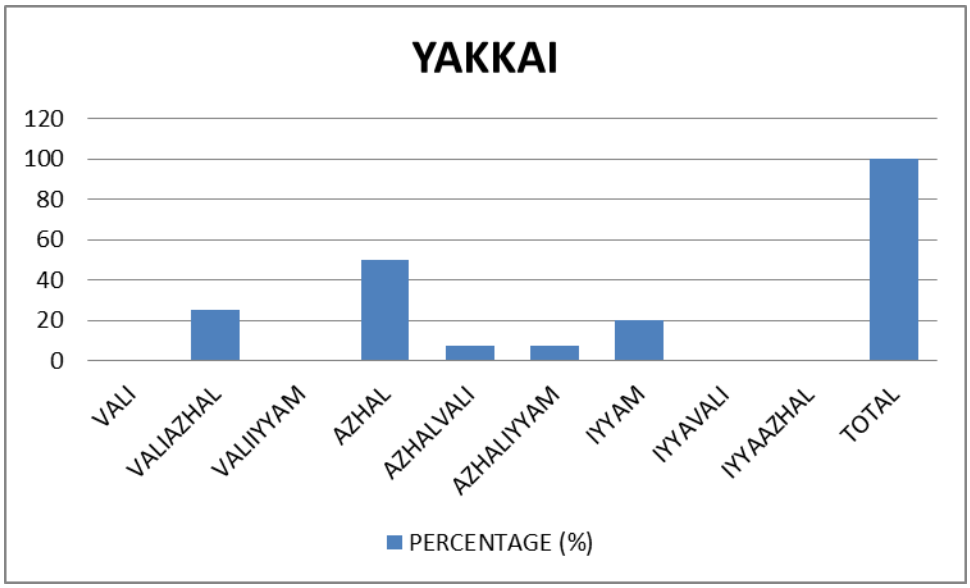
PARUVAKAALAM	NO. OF CASES	PERCENTAGE
Kaarkaalam	10	25%
Koothirkaalam	3	7%
Munpanikaalam	7	18%
Pinpanikaalam	4	10%
Ilavenilkaalam	8	20%
Muthuvenikaalam	8	20%



INFERENCE: Out of 40 cases, Disease got worsen at 10 cases(25%) in kaarkaalam, 3 cases (7%) in koothirkaalam, 7 cases(18%) in Munpanikaalam, 4 cases(10%) in Pinpanikaalam, 8 cases(20%) in ilavenilkaalam, 8 cases(20%) in Muthuvenil. kaalam

8.YAKKAI

S.NO	YAKKAI	NO.OF CASES	PERCENTAGE (%)
1	VALI	0	0
2	VALIAZHAL	10	25
3	VALIIYYAM	0	0
4	AZHAL	20	50
5	AZHALVALI	3	7.5
6	AZHALIYYAM	3	7.5
7	IYYAM	8	20
8	IYYAVALI	0	0
9	IYYAAZHAL	0	0
	TOTAL	40	100

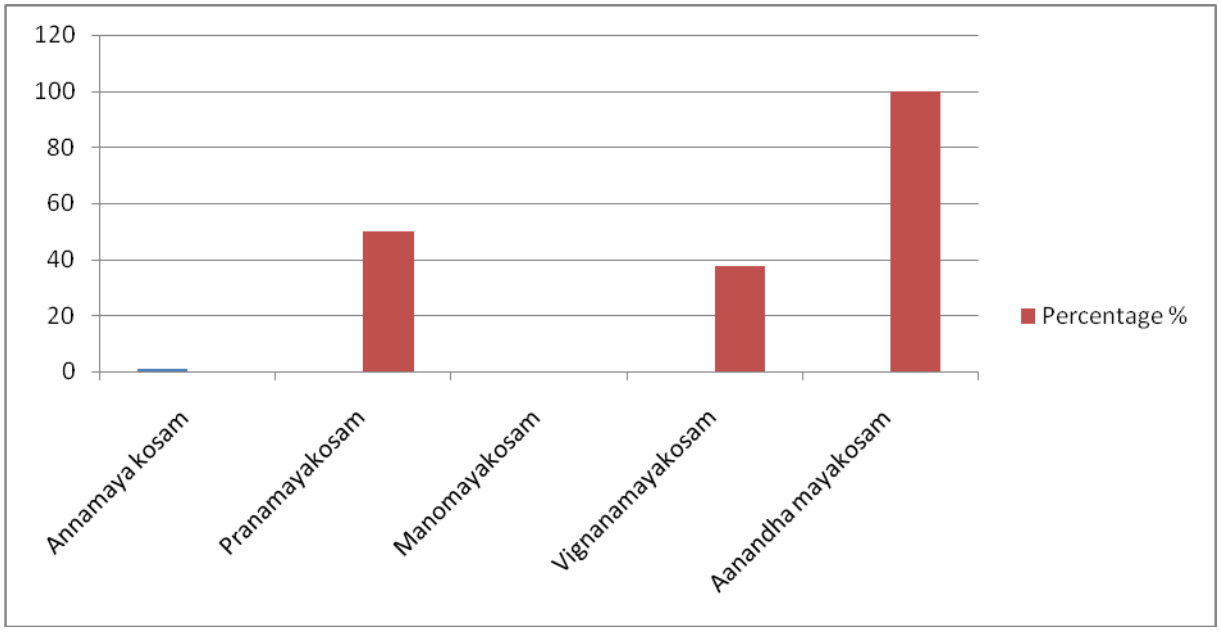


Inference: 25 %(10) cases were vathapitha thegi, 15%(6) cases were vathakaba thegi, 35 %(14) cases were pithavatha thegi, 15%(6) cases were pithakaba thegi, 5%(2) cases were kabavatha thegi, 5%(2) cases were kabapitha thegi

9.KOSANGAL

Kosam	No of Cases	Percentage %
Annamayakosam		
Pranamayakosam	20	50
Manomayakosam		
Vignanamayakosam	15	37.5
Aanandhamayakosam	40	100

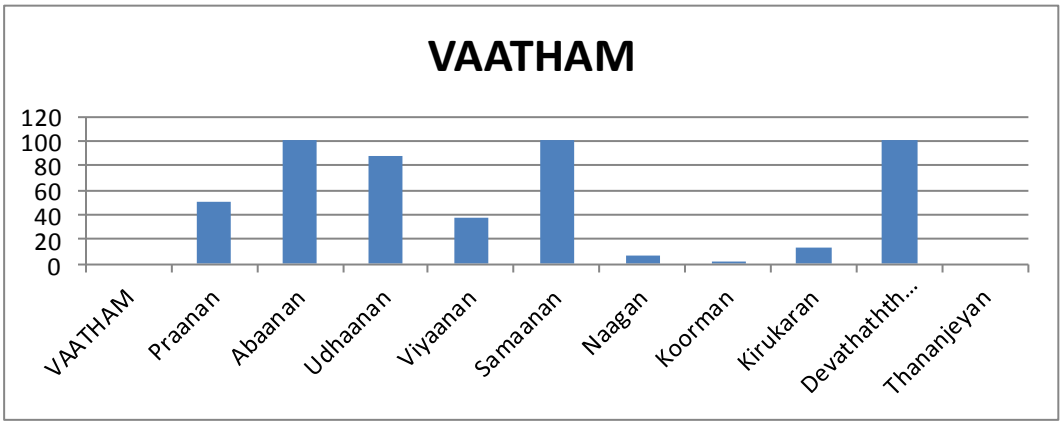
Kosangal



INFERENCE: Pranamayakosam (mild dyspnoea) was affected in 50% of cases , Vignanamayakosam was affected in 37.5 % of cases. Anandhamayakosam(Excessive menstrual bleeding)) was affected in all cases.

10.INCIDENCE ACCORDING TO MUKKUTRANGAL VAATHAM

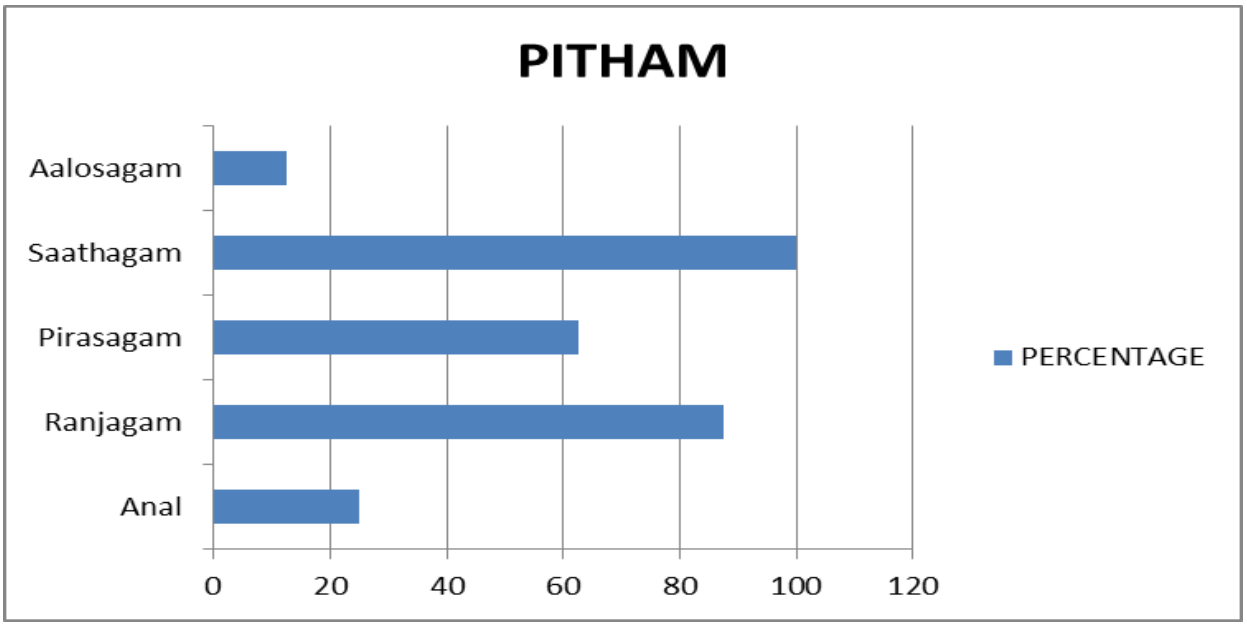
S.NO	VAATHAM	NO. OF CASES OUT OF 40	PERCENTAGE %
1	Praanan	20	50
2	Abaanan	40	100
3	Udhaanan	35	87.5
4	Viyaanan	15	37.5
5	Samaanan	40	100
6	Naagan	3	7.5
7	Koorman	1	2.5
8	Kirukaran	5	12.5
9	Devathaththan	40	100
10	Thananjeyan	-	0



INFERENCE:Pranan(Mild dyspnoea present) was affected in 50% cases.Abanan (excessive menstrual bleeding) was affected in 100% cases.Udhanan(tiredness) was affected in 87.5% cases. Viyanan(Pain present in the upper &lowerlimb) was affected in 37.5% cases. Samanan was affected in 100%. Kirukaran (polyphagia)was affected in 13% cases and Nagan (burning sensation present in both eyes) was affected in 7.5% cases and Devathaththan (tiredness, anxiety) was affected in 100% cases. Koorman was affected in 2.5%cases.

PITHAM

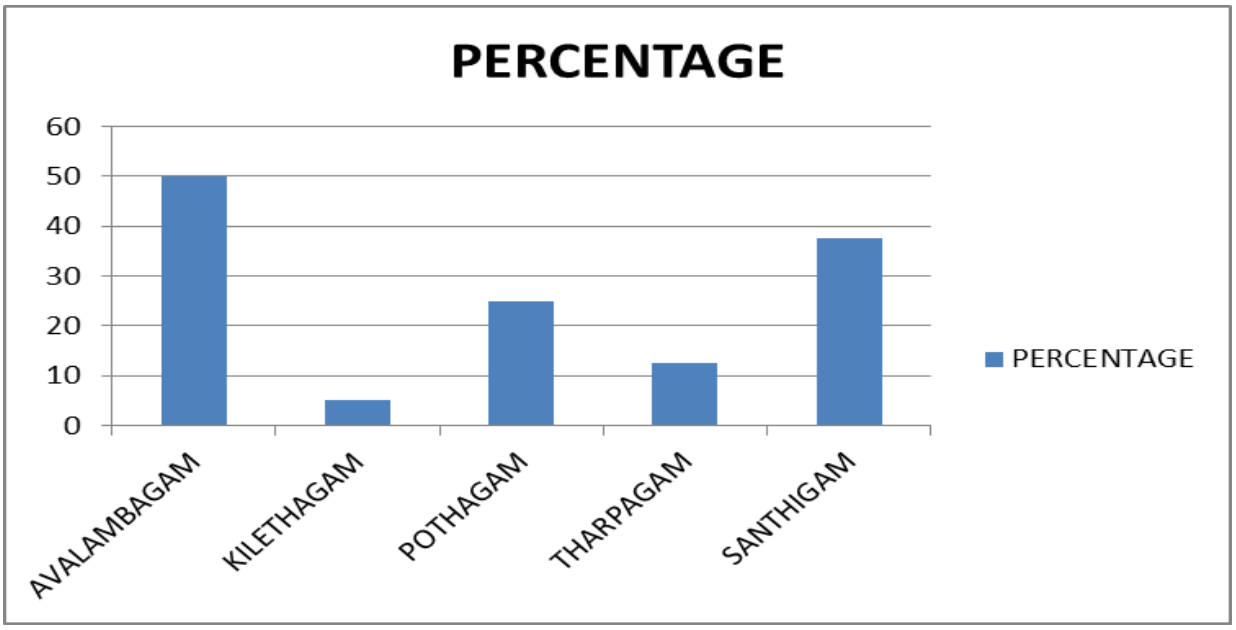
S.NO	PITHAM	NO. OF CASES OUT OF 40	PERCENTAGE
1	Anal	10	25
2	Ranjagam	35	87.5
3	Pirasagam	25	62.5
4	Saathagam	40	100
5	Aalosagam	5	12.5



INFERENCE: Among 40 cases Saathaga pittham(general tiredness) was affected in 100%(40)cases. Anal pittham(Increased appetite) was affected in 25% of cases(10). Ranjaga pitham (Altered blood Hb) was affected in 87.5%(35) cases, Pirasaga pittham(Pallor of skin) was affected in 62.5% cases(25). Aalosaga pitham(dullness of vision) was affected in 12.5% of cases(5).

KAPHAM

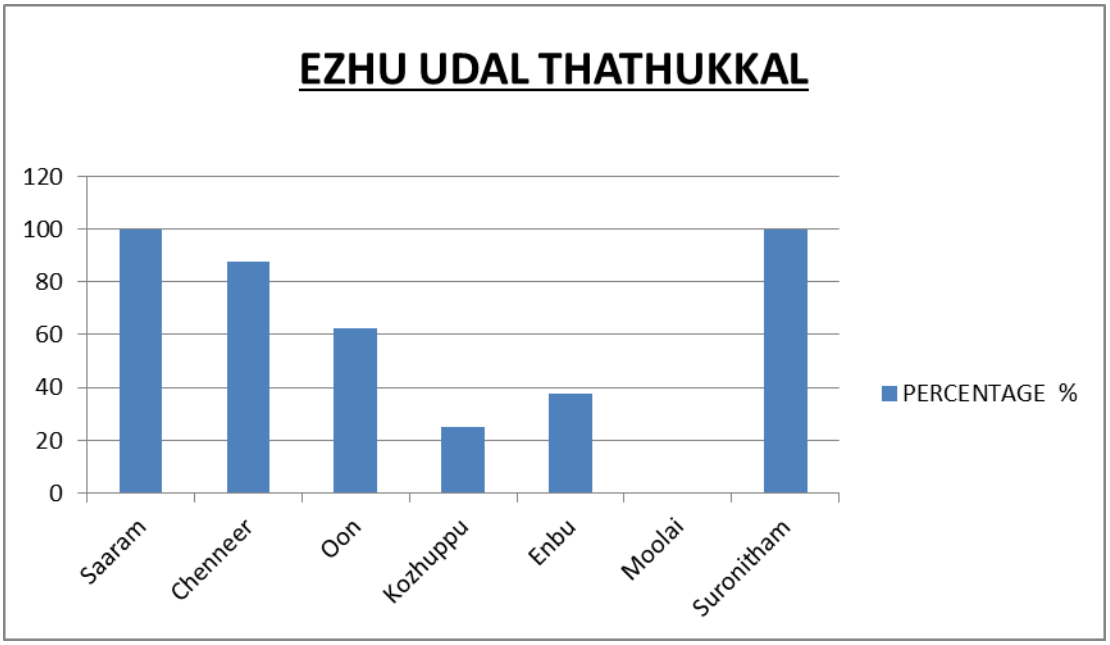
S.NO	KAPHAM	NO. OF CASES OUT OF 40	PERCENTAGE
1	AVALAMBAGAM	20	50
2	KILETHAGAM	2	5
3	POTHAGAM	10	25
4	THARPAGAM	5	12.5
5	SANTHIGAM	15	37.5



INFERENCE: Avalambagam(breathing difficulty) was affected in 50%(20 cases), kilethagam (increased appetite) was affected in 5% (2 cases),Pothagam was affected in25%(10 cases), Tharpagam(dullness of vision) affected in12.5%.(5 cases) Santhigam(Joint pain) was affected in 37.5%(15) .

11.EZHU UDAL THATHUKKAL

S.NO	UDAL THATHUKKAL	NO. OF CASES OUT OF 40	PERCENTAGE %
1	Saaram	40	100
2	Chenneer	35	87.5
3	Oon	25	62.5
4	Kozhuppu	10	25
5	Enbu	15	37.5
6	Moolai		
7	Suronitham	40	100



INFERENCE: In Udal Thathukkal, Saarm (general tiredness) was affected in 40 cases(100%) & Chenneer (altered blood Hb level) was affected in all cases.Oon(muscular pain) affected in 25 cases(62.5%) Kozhuppu (obesity) was affected in 25% (10) of cases. Enbu (joint pain) was affected in 37.5% (15) of cases.Suronitham (Increased menstrual bleeding) was affected in 100 %(40) of cases.

12.**ENNVAGAITHERVUGAL**

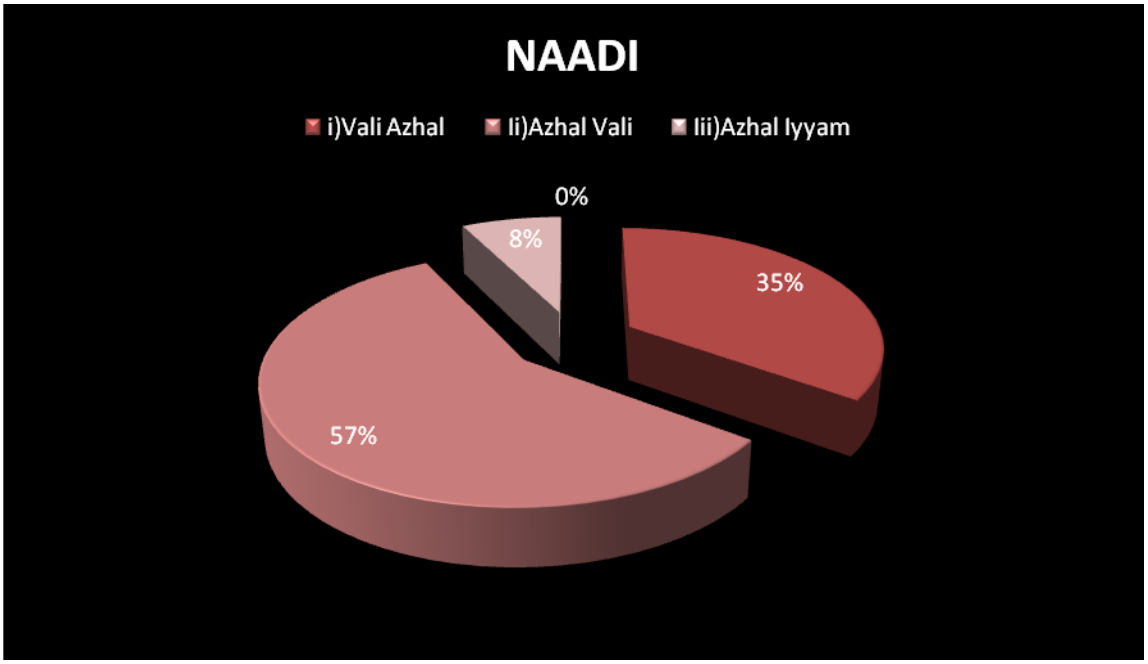
S.no	Ennvagaithervugal	No. of cases out of 40	Percentage (%)
1.	Sparisam	-	-
2.	Naa	35	85
3.	Niram	25	62.5
4.	Mozhi	-	-
5.	Vizhi	5	12.5
6.	Malam	2	5
7.	Mooththiram		
	i) slowly spread	22	55
	ii)Fastly spread	18	45
8.	Naadi		
	i)ValiAzhal	14	35
	Ii)AzhalVali	23	57.5
	Iii)AzhalIyyam	3	7.5

NAA **- (Pale/**Dryness/coating/fissure/glossitis)

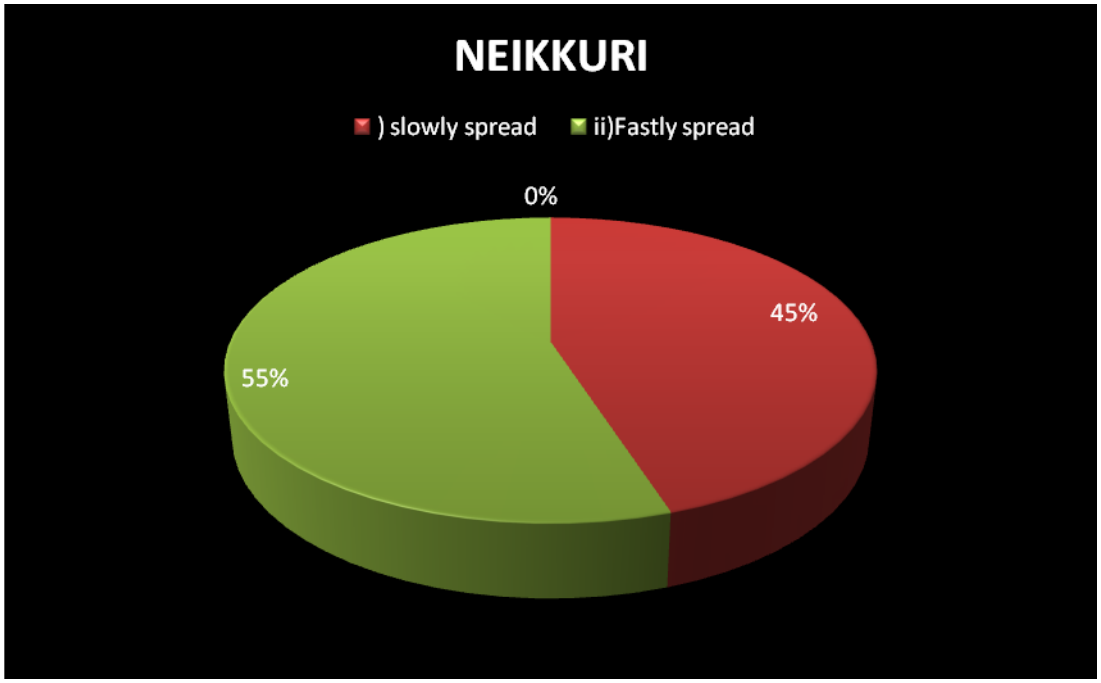
NIRAM - Pale

VIZHI - (pale/yellow/redness)

MALAM – constipation/diarrhoea



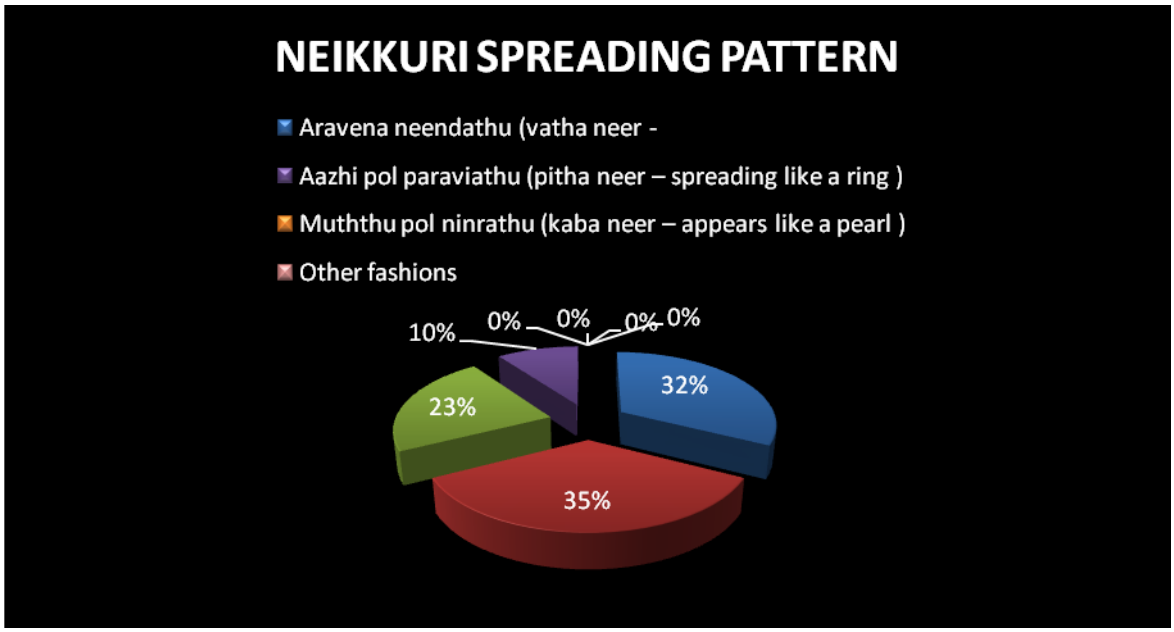
Observatiom: In NAADI 35% of cases are vali azhal, 8% of cases are azhal iyyam, 57% of cases are azhal vali.



Observation: In NEIKKURI 55% of cases are slowly spread, 45% of cases are fastly spread.

NEIKKURISPREADING PATTERN

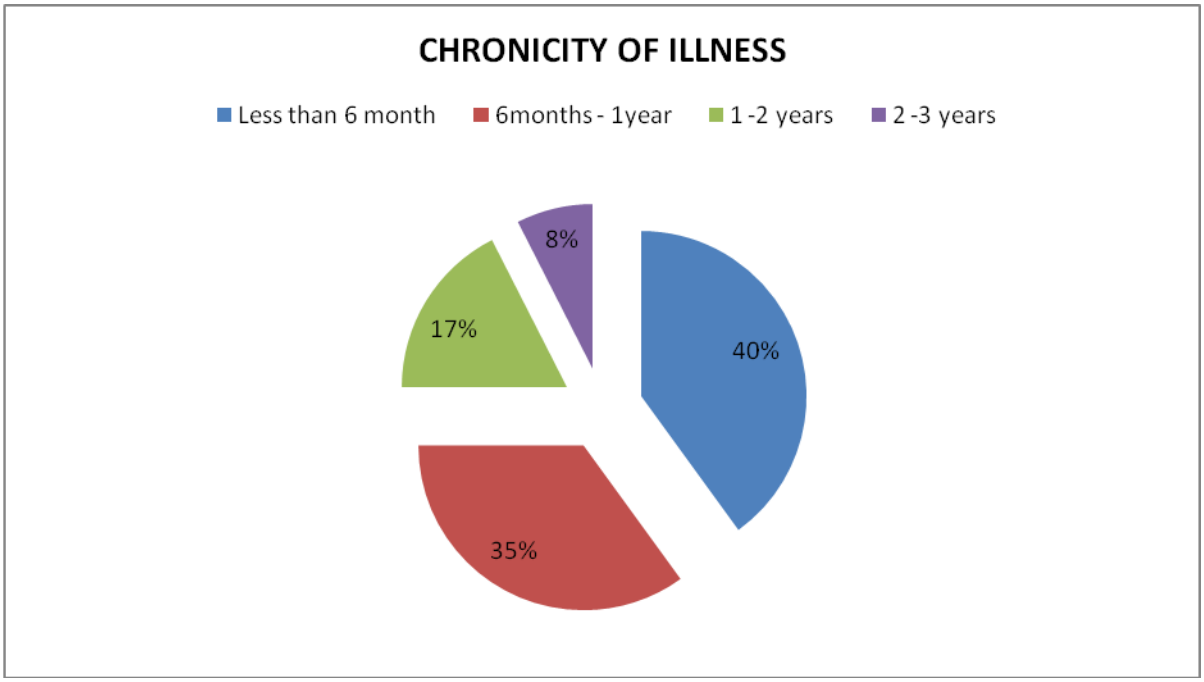
SPREADING PATTERN	NO OF CASES	PERCENTAGE(%)
Aravenaneendathu (vathaneer - lengthening like a snake)	13	32.5
Aazhi pol paraviathu (pithaneer – spreading like a ring)	14	35
Muththu pol ninrathu (kabaneer – appears like a pearl)	9	22.5
Other fashions	4	10
Total	40	100



Observation: In NEIKKURI SPREADING PATTERN 32% of cases are Aravenaneendathu (vathaneer -lengthening like a snake), 35% of cases are Aazhi pol paraviathu (pithaneer – spreading like a ring),23% of cases Muththu pol ninrathu (kabaneer – appears like a pearl), 10% of case are other fashions.

13.CHRONICITY OF ILLNESS

CHRONICITY OF ILLNESS	NO. OF CASES	PERCENTAGE
Less than 6 months	16	40%
6 month-1year	14	35%
1-2 years	7	17%
2-3 years	3	8%
Total	40	100%

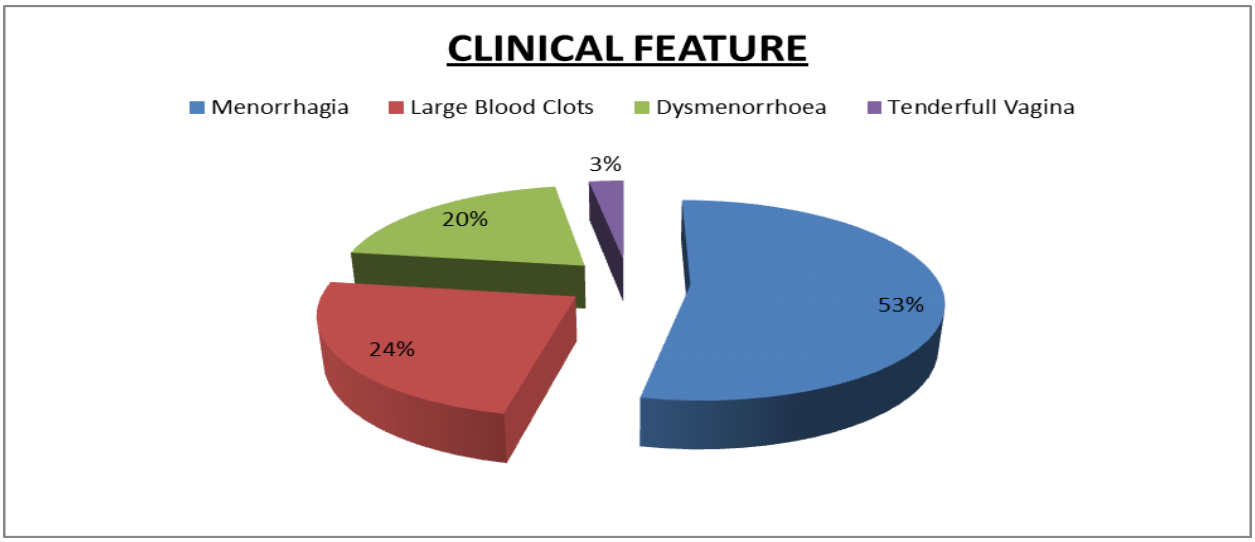


INFERENCE:40% (16) Patients had the history of this disease less than 6 months only, 35% (14) Patients suffered for 6months to 1 year, 17% (7) patients for 1-2 years and 8%(3) patients for 2-3 years.

CLINICAL FEATURES

1ST VISIT MENSTRUAL PHASE

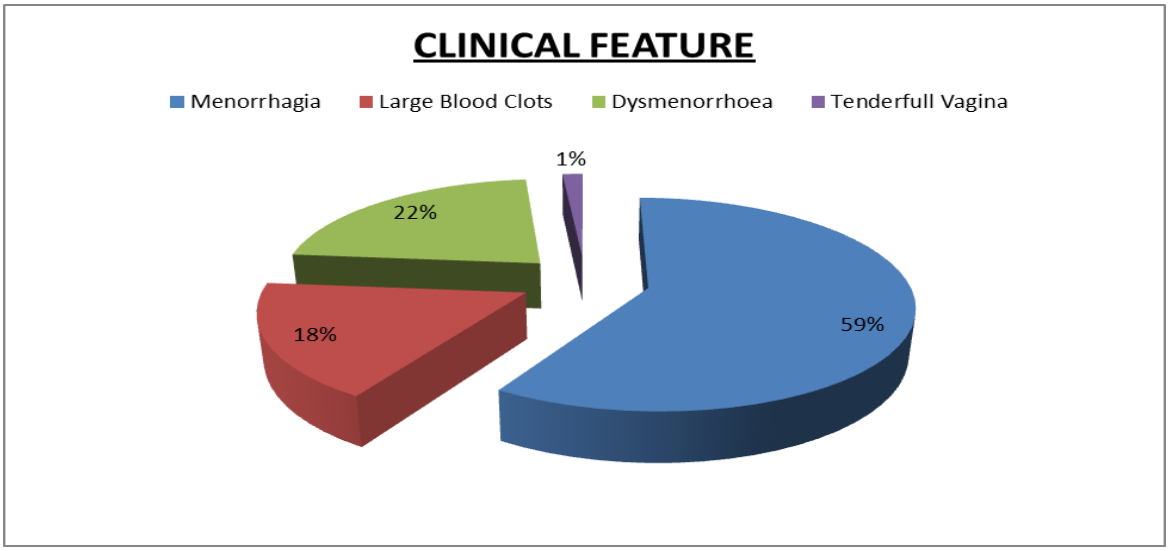
S.NO	CLINICAL FEATURE	NO. OF CASES			IMPROVEMENT	
		BEFORE TREATMENT	AFTER TREATMENT		BEFORE TREATMENT	AFTER TREATMENT
			No improvement	Improvement		
1	Menorrhagia	40	17	23	100%	57.5%
2	Large Blood Clots	18	9	9	45%	22.5%
3	Dysmenorrhoea	15	13	2	37.5%	5%
4	Vaginal Tenderness	2	2	0	5%	0%



CLINICAL FEATURES

2ST VISIT MENSTRUAL PHASE

S.NO	CLINICAL FEATURE	NO. OF CASES			IMPROVEMENT	
		BEFORE TREATMENT	AFTER TREATMENT		BEFORE TREATMENT	AFTER TREATMENT
			No improvement	Improvement		
1	Menorrhagia	40	12	28	100%	70%
2	Large Blood Clots	12	7	5	30%	12.5%
3	Dysmenorrhea	15	12	3	37.5%	7.5%
4	Vaginal tenderness	1	1	0	2.5%	2.5%



15.RESULT:PBAC [Pictorial Blood Assessment Chart]SCORE[17]

S.NO	OP.no	Age	PBAC (PICTORIAL BLOOD ASSESSMENT CHART) SCORE			
			1ST visit menstrual phase		2nd visit menstrual phase	
			Before treatment	After treatment	Before treatment	After treatment
1	H26941	32	570	0	340	0
2	H30049	22	295	55	315	68
3	H30700	34	470	96	380	92
4	H28203	28	278	0	183	0
5	H32302	24	380	128	280	35
6	H33883	45	210	0	160	0
7	H22709	27	433	105	374	86
8	H35574	25	250	13	238	39
9	H13670	23	367	77	321	34
10	H36565	38	243	0	180	0
11	H37003	26	281	0	236	0
12	H36989	45	355	0	323	0
13	H31970	26	236	0	187	0
14	H28861	34	188	0	176	0
15	H39438	45	267	0	193	0
16	H40268	44	332	0	280	0
17	H40329	38	231	0	232	0
18	H40473	18	187	27	194	0
19	H54585	36	396	43	242	0
20	H43707	42	386	0	291	0
21	H36057	37	225	0	218	0
22	H44770	42	262	0	296	0
23	H41386	20	193	63	210	41
24	H45383	34	414	128	440	15
25	H45740	45	460	0	425	0
26	H36248	30	216	92	316	58
27	H45524	26	263	18	238	0
28	H48435	43	412	0	434	0

29	H49348	42	363	16	394	0
30	H43321	40	484	126	465	118
31	H51792	39	463	39	491	42
32	H52099	25	116	0	112	0
33	H51847	40	271	0	115	0
34	H50801	23	181	0	145	0
35	H55764	42	242	0	216	0
36	H54407	45	269	0	247	0
37	H19379	45	206	0	202	0
38	H16543	27	418	16	383	26
39	H19642	39	374	61	278	0
40	G92380	38	392	10	343	21

RESULT:

With the evidence of statistical report, It showed that the significant clinical improvement (Arresting /Reduction of menstrual blood flow) with the percentage of 91.5% ($p<0.0003$)was observed at the end of the first menstrual cycle.

It is also observed at second menstrual cycle with significant clinical improvement of 93.5 %($p<0.0001$) .

Significant degree of clinical improvement between 1^{st} menstrual cycle and 2^{nd} menstrual cycle is present which is increased with the percentage of 12% ($p<0.0001$).

From the comparison between the two age group[above 30& below 30],the significant clinical response was better among the age group above 30 years than below 30 years ($P<0.0021$).

STATISTICAL ANALIYSIS

STATISTICAL ANALYSIS

All collected data were entered into computer using MS Excel software. The data entry eas cross-checked manually with CRF. The data was analyzed using STATA software. Mean and standard deviation was used to test the significance of treatment using before and after treatment data for two consecutive menstrual cycle on PBAC score(pictorial blood assessment chart)

The level of signification probability 0.05 was used to test the treatment difference and the values are statistically significant.

Mean and standard deviation of PBAC score in first menstrual cycle at before treatment and after treatment

Variable	Mean	Standard error	Standard deviation
*BT 1	314.475	16.50555	104.3903
**AT 1	27.825	6.613301	41.82619

The Mean ± standard deviation of PBAC score in first menstrual cycle at before treatment and after treatment were 314.4 ±16.5 and 104.3903± 41.82619 respectively which is statistically significant(t=18.8928p<0.0001)

Mean and standard deviation of PBAC score in second menstrual cycle at before treatment and after treatment

Variable	Mean	Standard error	Standard deviation
# BT 2	277.325	15.53286	98.23843
## AT 2	16.875	4.741414	29.98734

The Mean ± standard deviation of PBAC score in first menstrual cycle at before treatment and after treatment were 277 ±16.8 and 98.238± 29.987respectively which is statistically significant(t=18.8957p<0.0001)

Mean and standard deviation of PBAC score difference between first and second menstrual cycle

Variable	Mean	Standard error	Standard deviation
*BT 1	314.475	16.50555	104.3903
# BT 2	277.325	15.53286	98.23843

The Mean ± standard deviation of PBAC score difference between first and second menstrual cycle 314.475 ±277.325 and 104.39 ± 98.238 respectively which is statistically significant(t=3.9178p<0.0003)

Mean and standard deviation of PBAC score between age group above 30 and below 30

Variable	Mean	Standard error	Standard deviation
Below 30	272.93	23.86858	92.44262
Above 30	339.4	20.97379	104.869
Combined	314.475	16.505	104.3903
Difference	-66.4466	32.8133	

Mean and standard deviation of PBAC score between age group above 30 and below 30 is 272.9±339.4 and 92.442±104.869 respectively which is statistically significant(t=-2.0256,p>0.04).

*BT 1-Before Treatment 1st menstrual cycle

**AT 1-After Treatment 1st menstrual cycle

#BT 2- Before Treatment 2nd menstrual cycle

##AT 2-After Treatment 2nd menstrual cycle

OBSERVATION OF CLINICAL LABORATORY EXAMINATIONS

At the time of admission to the trial, in all the 40 patients the following parameters observed,

I.Routine blood investigations,

1.Haemoglobin estimation ,

2.Total WBC count,

3.total RBC count

4.Differential count,

5.Erythrocyte sedimentation Rate,

II. Blood sugar

1.Fasting

2.Post prandial

III. Liver function test,

IV. Renal function test,

V Serum Lipid Profile

VI. Urine examination

1.Albumin 2.Sugar 3.deposit

VII. Neer kuri,Nei kuri also observed.

Before treatment 1-20.

S.NO	OP.NP	AGE	Hb(gms%)	T.RBC	TC	DC%				ESR		B.S	
						P	L	E	M	1/2hr	1hr	FA	PP
1	H26941	32	8.4	3.9	10600	63	33	3	1	20	54	89	116
2	H30049	22	10.7	5.2	7700	50	46		4	10	24	83	103
3	H30700	34	11.4	4.6	9600	56	38	4	2	6	12	92	136
4	H28203	28	10.6	4.1	9000	54	41	4	1	40	82	94	113
5	H32302	24	12.5	4.6	9800	54	39	7		10	24	90	150
6	H33883	45	9.8	4.5	9900	69	25	4	2	12	26	103	127
7	H22709	27	8	4.4	9200	61	36		3	20	46	101	115
8	H35574	25	9.7	5.2	9000	63	32	5		4	10	89	66
9	H13670	23	9.5	4.2	7900	65	29	4	2	40	86	101	120
10	H36565	38	10	4.8	9500	58	36	4	2	16	24	86	107
11	H37003	26	8	4.2	9200	62	34	3	1	10	20	104	116
12	H36989	45	11.6	4.3	5200	59	37	4	0	16	32	100	88
13	H31970	26	14.6	5.1	8200	51	44	4	1	6	12	80	112
14	H28861	34	11.7	4.5	6700	55	41	4		20	42	108	148
15	H39438	45	11.7	4.1	9900	71	25	4		12	28	119	135
16	H40268	44	8	3.8	7000	59	37	3	1	32	66	98	136
17	H40329	38	11	4.3	6400	69	26	4	1	8	16	93	99
18	H40473	18	10.7	5.2	7700	50	46		4	10	24	83	103
19	H54585	36	8.4	3.9	10600	63	33	3	1	20	54	89	116
20	H43707	42	12.5	4.6	8600	65	33	2		6	12	98	

Before treatment 21-40

S.NO	OP.NP	AGE	HB(gm%)	T.RBC	TC	DC%				ESR		B.S	
						P	L	E	M	1/2hr	1hr	FA	PP
21	H36057	37	11.4	4	7000	60	34	5	1	14	28	122	146
22	H44770	42	9.5	4.3	6000	60	35	5		20	40	102	120
23	H41386	20	8.4	3.4	6000	55	38	4	3	30	62	64	101
24	H45383	34	13.7	4.8	8200	53	42	4	1	8	16	85	106
25	H45740	45	10.7	4.1	9000	71	25	4		12	28	120	130
26	H36248	30	99	4.5	8000	54	43	3		24	50	98	128
27	H45524	26	10.8	4.4	6900	55	40	4	1	6	12	78	102
28	H48435	43	10.2	4.5	8100	70	24	4	2	30	64	63	96
29	H49348	42	10.5	4.4	10300	58	36	4	2	14	28	84	158
30	H43321	40	13.4	4.2	5600	56	37	3	5	10	20	98	120
31	H51792	39	11.3	4.6	8600	61	34	4	1	12	26	103	121
32	H52099	25	13	4.1	5600	66	30	3	1	2	6	84	90
33	H51847	40	10	5	9500	57	38	4	1	16	34	116	125
34	H50801	23	11.5	4.6	7600	50	45	3	2	12	24	95	115
35	H55764	42	11.6	4.6	7000	50	46	2	2	16	32	82	104
36	H54407	45	9	4.3	8900	65	30	4	1	30	62	96	124
37	H19379	45	10.7	4.1	9000	71	25	4		12	28	120	130
38	H16543	27	10.8	4.4	6900	55	40	4	1	6	12	78	102
39	H19642	39	10	4.8	9500	58	36	4	2	16	24	86	107
40	G92380	38	11	4.3	6400	69	26	4	1	8	16	93	99

After treatment 1-20

S.NO	OP.NP	AGE	HB(gm%)	T.RBC	TC	DC%				ESR		B.S	
						P	L	E	M	1/2hr	1hr	FA	PP
1	H26941	32	9.8	9.1	10600	63	33	3	1	10	14	98	130
2	H30049	22	11	5.2	7600	51	45	1	3	4	12	78	120
3	H30700	34	10.8	4.6	9600	54	38	4	2	10	20	80	110
4	H28203	28	10	4.1	8800	63	36	1		20	40	86	140
5	H32302	24	12	4.2	9600	56	37	4	1	12	24	86	168
6	H33883	45	10	4.8	10600	66	28	4	2	10	20	116	140
7	H22709	27	8.4	4.2	9200	63	35	3	1	6	12	98	120
8	H35574	25	10	5.1	8800	62	33	3	2	10	20	86	92
9	H13670	23	11	5.2	7600	51	45	1	3	4	12	78	120
10	H36565	38	10.8	9.8	8600	58	34	4	4	14	28	98	120
11	H37003	26	8.4	4.2	9200	63	35	3	1	6	12	98	120
12	H36989	45	11.7	4.1	7800	61	33	4	2	10	22	106	136
13	H31970	26	14.2	5.1	8200	51	43	4	2	6	12	78	110
14	H28861	34	12.6	4.5	6300	56	42	2		10	12	116	150
15	H39438	45	11.7	4.1	7800	61	33	4	2	12	28	106	136
16	H40268	44	8.6	3.8	6400	62	36	1	1	28	52	86	140
17	H40329	38	12	4.3	6800	70	25	4	1	8	16	110	150
18	H40473	18	9	3.6	6000	56	37	2	4	22	46	74	98
19	H54585	36	9.2	4	10300	62	34	3	1	20	48	110	125
20	H43707	42	12.8	4.6	8600	65	32	2	1	6	12	110	

After treatment 21-40

S.NO	OP.NP	AGE	HB(gm%)	T.RBC	TC	DC%				ESR		B.S	
						P	L	E	M	1/2hr	1hr	FA	PP
21	H36057	37	12	4.1	7200	60	24	4	1	12	24	120	150
22	H44770	42	10.5	4.5	6800	61	34	5		20	40	116	124
23	H41386	20	9	3.6	6000	56	37	2	4	22	46	74	98
24	H45383	34	13.2	4.8	8600	56	40	2	2	10	16	99	125
25	H45740	45	11.7	4.1	7800	61	33	4	2	10	22	106	136
26	H36248	30	10.6	4.5	8200	54	42	3	1	16	24	96	116
27	H45524	26	11.2	4.6	7000	56	42	1	1	6	10	64	120
28	H48435	43	11.6	4.4	8600	68	26	4	2	10	20	68	102
29	H49348	42	11.6	4.4	9800	59	37	3	1	10	20	96	160
30	H43321	40	13.8	4.4	5400	58	39	2	1	6	11	86	108
31	H51792	39	12.1	4.8	8200	60	33	4	1	8	12	113	177
32	H52099	25	12.9	4.3	5000	58	36	4	2	2	4	72	99
33	H51847	40	11.2	5	9500	56	37	4	2/b-1	14	28	115	
34	H50801	23	12.6	4.6	7800	56	43	1		10	20	84	105
35	H55764	42	12.2	4.6	8600	56	42	2		12	24	96	110
36	H54407	45	9.8	4.3	8600	65	31	2	2	20	40	86	128
37	H19379	45	11.7	4.1	7800	61	33	4	2	10	22	106	136
38	H16543	27	11.2	4.6	7000	56	42	1	1	6	10	64	120
39	H19642	39	10.8	9.8	8600	58	34	4	4	14	28	98	120
40	G92380	38	12	4.3	6800	70	25	4	1	8	16	110	150

Before treatment 1-20

S.no	OP.NO	AGE	LIPID PROFILE(mg/dl)					RFT(mg/dl)			LIVER FUNCTION TEST										
			T.CH0	HDL	LDL	VLDL	TGL	U	Cr	U.A	T.B (mg/dl)	D.B (mg/dl)	I.B (mg/dl)	OT (IU/L	PT (IU/L)	ALK (IU/L)	T.P(gms%)	ALB(gms%)	GL(gms%)	Ca(mg/dl)	P(mg/dl)
1	H26941	32	115	42	80	10	51	15	0.7	3.5	0.6	0.3	0.3	16	17	112	7.5	4.1	3.4	7.9	2.5
2	H30049	22	125	44	69	15	74	16	0.8	5.1	0.4	0.1	0.3	17	17	87	8	4.5	3.5	8.6	4.5
3	H30700	34	150	47	68	27	134	15	0.7	3.5	0.6	0.3	0.3	16	17	112	7.5	4.1	3.4	8.4	3.9
4	H28203	28	176	63	78	15	73	17	0.8	4.9	0.4	0.2	0.2	18	20	71	7.8	4.4	3.4	8.2	3.4
5	H32302	24	112	44	63	13	63	14	0.7	3.5	0.4	0.2	0.2	19	18	109	8	4.4	3.6	9.1	3.8
6	H33883	45	164	51	101	27	133	15	0.8	4.7	0.5	0.2	0.3	11	10	90	8	4.5	3.5	8.1	4
7	H22709	27	170	59	92	17	87	14	0.8	6.3	0.6	0.2	0.4	19	16	61	8	4.6	3.4	9.8	7.2
8	H35574	25	164	48	98	29	140	26	0.8	2.6	0.8	0.4	0.4	28	30	80	8	4.2	3.8	8.6	3.6
9	H13670	23	173	42	97	17	87	19	1	4.2	0.9	0.4	0.5	24	26	98	6.2	3.1	3.1	8.2	3
10	H36565	38	185	40	86	38	192	24	0.9	5.1	0.3	0.1	0.2	18	20	86	7.4	4	3.4	8.7	3.6
11	H37003	26	170	60	92	17	87	14	0.8	6.3	0.6	0.2	0.4	19	16	61	8.6	4.6	3.4	9.8	7.2
12	H36989	45	254	51	97	30	149	14	0.9	4.9	1.2	0.4	0.8	25	32	91	7.7	4.6	3.1	9.1	3.3
13	H31970	26	174	51	97	30	149	17	0.9	4.9	1.2	0.4	0.8	25	32	91	7.7	4.6	3.1	9.1	3.3
14	H28861	34	146	60	80	11	57	15	0.8	4.3	0.5	0.2	0.3	17	13	72	7.3	4.2	3.1	7.4	4
15	H39438	45	184	47	112	45	225	22	0.9	5.2	0.5	0.2	0.3	18	15	50	7.4	4.4	3	8.8	6.4
16	H40268	44	142	55	86	50	251	19	1.1	5	0.2	0.1	0.1	18	12	55	7.2	3.7	3.5	7.7	2.8
17	H40329	38	168	69	97	16	79	15	0.9	3	0.9	0.3	0.6	14	17	42	7.4	4.4	3	8.1	3.6
18	H40473	18	125	44	69	15	74	16	0.8	5.1	0.4	0.1	0.3	17	17	87	8	4.5	3.5	8.6	4.5
19	H54585	36	115	42	80	10	51	15	0.7	3.5	0.6	0.3	0.3	16	17	112	7.5	4.1	3.4	7.9	2.5
20	H43707	42	181	48	110	36	179	15	0.9	3.7	1.1	0.4	0.7	16	15	57	7.6	4.5	3.1	8.3	4

Before treatment 21-40

S.no	OP.NO	AGE	LIPID PROFILE(mg/dl)					RFT(mg/dl)			LIVER FUNCTION TEST										
			T.CHO	HDL	LDL	VLDL	TGL	U	Cr	U.A	T.B (mg/dl)	D.B (mg/dl)	I.B (mg/dl)	OT (IU/L)	PT (IU/L)	ALK (IU/L)	T.P(gms%)	ALB(gms%)	GL(gms%)	Ca(mg/dl)	P(mg/dl)
21	H36057	37	168	57	102	23	115	19	0.9	4.6	1.1	0.4	0.7	18	12	76	7.6	4.1	3.5	8.1	2.4
22	H44770	42	147	32	92	40	201	13	0.3	2.1	0.7	0.3	0.4	15	17	69	7.6	4.6	3	8.6	2.5
23	H41386	20	134	43	80	17	87	17	1.1	3.6	0.9	0.3	0.6	21	19	86	7.9	4.4	3.5	10.5	3.5
24	H45383	34	227	57	134	48	216	20	1	2.7	0.4	0.2	0.2	20	21	46	8.2	4.7	3.5	9.3	3.7
25	H45740	45	184	47	112	45	225	22	0.9	5.2	0.5	0.2	0.3	18	15	50	7.4	4.4	3	8.8	6.4
26	H36248	30	168	56	102	17	86	25	0.9	2.6	0.2	0.1	0.1	11	7	60	6.8	3.6	3.2	8.7	3.6
27	H45524	26	144	53	77	9	44	26	0.9	1.4	0.5	0.2	0.3	22	24	65	7.4	4.1	3.3	8.7	3.1
28	H48435	43	126	37	69	26	128	17	0.8	2.8	0.3	0.1	0.2	13	13	51	6.6	3.1	4.5	8.8	2.4
29	H49348	42	152	43	94	25	128	20	0.8	4.2	0.4	0.2	0.2	13	11	73	7.3	4.2	3	7.9	3.8
30	H43321	40	168	56	102	17	86	15	0.7	4.4	0.4	0.1	0.3	17	20	64	8.1	4.5	3.6	8.7	2.9
31	H51792	39	173	54	95	22	110	24	0.9	4.4	0.4	0.1	0.3	17	20	64	8.1	4.5	3.6	8.7	2.9
32	H52099	25	237	51	147	27	137	11	0.9	5.2	0.4	0.2	0.2	28	13	0.5	7.4	4.5	2.9	8.3	4.9
33	H51847	44	199	53	117	20	98	27	0.7	3.1	0.6	0.2	0.4	21	19	71	7.5	4.2	3.3	8.9	3.3
34	H50801	23	140	38	82	32	160	14	0.8	3.9	0.3	0.1	0.2	17	13	49	7.5	4.1	3.1	9.2	6.1
35	H55764	42	192	50	121	38	191	17	0.8	4.5	0.3	0.2	0.1	22	13	68	6.9	4	3	8.3	4.4
36	H54407	45	183	53	107	26	131	22	0.8	3.8	0.4	0.2	0.2	15	12	57	6.5	3.9	2.6	7.5	5.9
37	H19379	45	184	47	112	45	225	22	0.9	5.2	0.5	0.2	0.3	18	15	50	7.4	4.4	3	8.8	6.4
38	H16543	27	144	53	77	9	44	26	0.9	1.4	0.5	0.2	0.3	22	24	65	7.4	4.1	3.3	8.7	3.1
39	H19642	39	185	40	86	38	192	24	0.9	5.1	0.3	0.1	0.2	18	20	86	7.4	4	3.4	8.7	3.6
40	G92380	38	168	69	97	16	79	15	0.9	3	0.9	0.3	0.6	14	17	42	7.4	4.4	3	8.1	3.6

After treatment 1-20

S.no	OP.NO	AGE	LIPID PROFILE(mg/dl)					RFT(mg/dl)			LIVER FUNCTION TEST										
			T.CHO	HDL	LDL	VLDL	TGL	U	Cr	U.A	T.B (mg/dl)	D.B (mg/dl)	I.B (mg/dl)	OT (IU/L)	PT (IU/L)	ALK (IU/L)	T.P(gms%)	ALB(gms%)	GL(gms%)	Ca(mg/dl)	P(mg/dl)
1	H26941	32	116	88	76	14	78	15	0.7	3.5	0.8	0.4	0.4	19	19	120	7.5	9.2	3.3	8.2	2.5
2	H30049	22	125	45	68	17	80	16	0.9	5	0.4	0.1	0.3	17	17	87	8	4.5	3.5	8.5	4.5
3	H30700	34	168	52	58	19	152	26	0.6	3.5	0.6	0.2	0.4	16	19	116	7.6	4.2	3.4	8.4	3.9
4	H28203		180	60		18	98	18	0.8	3.6	0.6	0.3	0.3	18	20	71	7.8	3.4	4.4	8.2	3.4
5	H32302	24	168	57	108	23	115	19	0.9	4.6	1.1	0.4	0.7	18	12	76	7.6	4.1	3.5	8.1	2.4
6	H33883	45	158	54	96	24	140	16	0.8	4.6	0.5	0.2	0.3	16	12	98	8	4.5	3.5	8.6	4
7	H22709	27	180	58	89	19	87	18	0.7	6.1	0.6	0.4	0.2	19	18	65	8.6	3.4	4.6	10.2	7.2
8	H35574	25	162	49	84	29	140	26	0.8	2.6	0.8	0.4	0.4	28	30	82	8	4.3	3.7	8.8	3.6
9	H13670	23	125	45	68	17	80	16	0.9	5	0.4	0.1	0.3	17	17	87	8	4.5	3.5	8.5	4.5
10	H36565	38	192	46		48	210	21	0.9	5.1	0.3	0.1	0.2	18	20	86	7.4	4	3	8	3.6
11	H37003	26	180	58	89	19	87	18	0.7	6.1	0.6	0.4	0.2	19	18	65	8.6	3.4	4.6	10.2	7.2
12	H36989	45	186	48	120	39	391	21	0.8	5	0.3	0.1	0.2	19	16	53	7.4	4	3.4	9.5	4
13	H31970	26	172	56	95	30	158	16	0.8	5	1.2	0.4	0.8	25	32	79	7.7	4.6	3.1	9.2	3.3
14	H28861	34	132	61	82	18	56	16	0.6	3.8	0.6	0.4	0.2	18	19	80	7.6	4.3	3.3	7.8	3.8
15	H39438	45	186	48	120	39	391	21	0.8	5	0.3	0.1	0.2	19	16	53	7.4	4	3.4	9.5	4
16	H40268	44	146	52	84	50	25	26	1.2	4.8	0.2	0.1	0.1	28	26	89	7.8	3.4	4.4	7.8	2.6
17	H40329	38	164	66	94	18	98	15	0.9	3	0.9	3	0.6	14	17	42	7.4	4.4	3	8.1	3.6
18	H40473	18	126	41	86	16	94	16	1.1	3.8	0.7	0.4	0.3	19	18	94	8.2	4.2	4	10.6	3.6
19	H54585	36	120	36		18	58	16	0.8	3.6	0.6	0.3	0.3	16	19	106	7.5	4.1	3.4	8.1	2.5
20	H43707	42	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

After treatment 21-40

S.no	OP.NO	AGE	LIPID PROFILE(mg/dl)					RFT(mg/dl)			LIVER FUNCTION TEST										
			T.CH(	HDL	LDL	VLDL	TGL	U	Cr	U.A	T.B	D.B	I.B	OT	PT	ALK	T.P(gm	ALB(g	GL(gm	Ca(m	P(m
											(mg/dl)	(mg/dl)	(mg/dl)	(IU/L)	(IU/L)	(IU/L)	s%)	ms%)	s%)	g/dl)	g/dl)
21	H36057	37	160	52	98	22	116	18	8	4.4	1.1	0.4	0.7	18	12	76	7.6	4.1	3.5	8.1	2.4
22	H44770	42	152	38	98	46	210	14	0.7	3.5	0.4	0.2	0.2	15	17	69	7.6	4.6	3	8.9	2.5
23	H41386	20	126	41	86	16	94	16	1.1	3.8	0.7	0.4	0.3	19	18	94	8.2	4.2	4	10.6	3.6
24	H45383	34	230	56	140	41	225	20	0.9	2.8	0.5	0.2	0.3	20	26	58	8.2	4.7	3.5	9.3	3.7
25	H45740	45	186	48	120	39	391	21	0.8	5	0.3	0.1	0.2	19	16	53	7.4	4	3.4	9.5	4
26	H36248	30	159	62	104	17	90	26	0.8	2.4	0.2	0.1	0.1	11	14	60	6.6	3.4	3.2	8.7	3.6
27	H45524	26	132	54	68	20	44	26	0.9	2	0.5	0.2	0.3	22	24	65	6.8	3.4	3.4	8.7	3.1
28	H48435	43	135	42	68	24	128	18	0.9	2.8	0.3	0.1	0.2	15	17	58	6.8	3.2	4.6	8.9	2.4
29	H49348	42	148	42	96	29	160	20	0.8	4.2	0.4	0.2	0.2	13	11	73	7.3	4.3	3	7.9	3.8
30	H43321	40	156	58	97	17	103	16	0.8	4.2	0.4	0.1	0.2	18	21	68	8	3.8	4.2	8.8	2.6
31	H51792	39	170	51	96	23	120	24	0.9	4.4	0.4	0.1	0.3	17	20	64	8.1	4.5	3.6	9	2.9
32	H52099	25	195	64	28	27	133	11	0.7	6.3	0.4	0.2	0.2	11	11	111	7.7	4.3	4.4	9	8.2
33	H51847	44	210	53	118	21	98	27	0.8	3.1	0.6	0.2	0.4	22	20	70	7.5	4.2	3.3	9	3.3
34	H50801	23	142	36	83	34	160	16	0.8	3.8	0.3	0.1	0.2	18	16	50	7.6	4.4	3.2	9.2	6.1
35	H55764	42	191	56	120	29	191	18	0.8	4.6	0.4	0.2	0.2	22	13	18	6.8	4.6	3.2	8.6	4.4
36	H54407	45	186	48	120	39	391	21	0.8	5	0.3	0.1	0.2	19	16	53	7.4	4	3.4	9.5	4
37	H19379	45	135	42	68	24	128	18	0.9	2.8	0.3	0.1	0.2	15	17	58	6.8	3.2	4.6	8.9	2.4
38	H16543	27	180	58	89	19	87	18	0.7	6.1	0.6	0.4	0.2	19	18	65	8.6	3.4	4.6	10.2	7.2
39	H19642	39	192	46	0	48	210	21	0.9	5.1	0.3	0.1	0.2	18	20	86	7.4	4	3	8	3.6
40	G92380	38	164	66	94	18	98	15	0.9	3	0.9	3	0.6	14	17	42	7.4	4.4	3	8.1	3.6

Before and After treatment 1-20

BEFORE TREATMENT													AFTER TREATMENT										
S.no	OP.NO	Age / sex	Alb	Sugar		Deposi		Neerkuri	Neikuri	BS	BP	Uro.Bili	Alb	Sugar		Deposit		Neerkuri	Neikuri	BS	BP	Uro.Bili
				FA	PP	pus cells	Epi cells							FA	PP	Puscells	Epi cells					
1	H26941	32	Nil	Nil	Nil	1-3	1-3	Pale yellow, clear	Pearl shape	Nil	Nil	Normal	Nil	Nil	Nil	1-2	1-2	Pale yellow, clear	Pearl shape	Nil	Nil	Normal
2	H30049	22	Nil	Nil	Nil	10-12	12-16	Pale yellow, cloudy	Pearl shape	Nil	Nil	Normal	Nil	Nil	Nil	1-2	1-2	Pale yellow, clear	Pearl shape	Nil	Nil	Normal
3	H30700	34	Nil	Nil	Nil	2-4	2-4	Colourless, clear	Pearl shape	Nil	Nil	Normal	Nil	Nil	Nil	2-4	1-2	Pale yellow	Round shape	Nil	Nil	Normal
4	H28203	28	Nil	Nil	Nil	2-4	3-5	Yellow colour	Pearl shape	Nil	Nil	Normal	Nil	Nil	Nil	1-2	1-2	Pale yellow	Pearl shape	Nil	Nil	Normal
5	H32302	24	Nil	Nil	Nil	2-4	2-4	Colourless, notclear, cloudy appearance	Irregular shape, moderaters	Nil	Nil	Normal	Nil	Nil	Nil	2-3	1-2	Colourless, clear	Semi circle, slowly spread	Nil	Nil	Normal
6	H33883	45	Nil	Nil	Nil	1-2	4-5	Colourless, clear	Semi circle, slowly	Nil	Nil	Normal	Nil	Nil	Nil	6-7	1-2	Colourless, clear	Pearl shape	Nil	Nil	Normal
7	H22709	27	Nil	Nil	Nil	1-2	1-2	Pale yellow	Round shape	Nil	Nil	Normal	Nil	Nil	Nil	2-4	2-4	Pale yellow depos	Round shape	Nil	Nil	Normal
8	H35574	25	Nil	Nil	Nil	2-4	1-2	Pale yellow, clear	Pearl shape	Nil	Nil	Normal	Nil	Nil	Nil	1-2	1-2	Pale yellow, clear	Pearl shape	Nil	Nil	Normal
9	H13670	23	Nil	Nil	Nil	2-4	2-4	Yellow colour	Pearl shape	Nil	Nil	Normal	Nil	Nil	Nil	2-4	2-4	Pale yellow	Sieve pattern	Nil	Nil	Normal
10	H36565	38	Nil	Nil	Nil	3-5	2-4	Colourless, clear	Bean shape	Nil	Nil	Normal	Nil	Nil	Nil	1-2	2-3	Pale yellow	Round shape	Nil	Nil	Normal
11	H37003	26	Nil	Nil	Nil	3-5	4-6	Lemon yellow	Round shape	Nil	Nil	Normal	Nil	Nil	Nil	2-4	1-2	Yellow colour	Pearl shape	Nil	Nil	Normal
12	H36989	45	Nil	Nil	Nil	2-3	2-3	Pale yellow	Pearl shape	Nil	Nil	Normal	Nil	Nil	Nil	1-2	2-3	Colourless, clear	Round shape	Nil	Nil	Normal
13	H31970	26	Nil	Nil	Nil	2-4	2-4	Pale yellow	Sieve pattern	Nil	Nil	Normal	Nil	Nil	Nil	3-5	2-4	Pale yellow	Pearl shape	Nil	Nil	Normal
14	H28861	34	Nil	Nil	Nil	20-25		Pale yellow	Round shape	Nil	Nil	Normal	Nil	Nil	Nil	2-4	2-4	Colourless, clear	Pearl shape	Nil	Nil	Normal
15	H39438	45	Nil	Nil	Nil	10-12	12-16	Pale yellow, clear	Round shape	Nil	Nil	Normal	Nil	Nil	Nil	1-2	1-2	Colourless, clear	Round shape	Nil	Nil	Normal
16	H40268	44	Nil	Nil	Nil	2-4	2-4	Pale yellow, cloudy	Pearl shape	Nil	Nil	Normal	Nil	Nil	Nil	2-4	2-4	Pale yellow depos	Pearl shape	Nil	Nil	Normal
17	H40329	38	Nil	Nil	Nil	2-4	3-5	Colourless, clear	Pearl shape	Nil	Nil	Normal	Nil	Nil	Nil	1-2	2-3	Pale yellow, clear	Sieve pattern	Nil	Nil	Normal
18	H40473	18	Nil	Nil	Nil	2-4	2-4	Yellow colour	Bean shape	Nil	Nil	Normal	Nil	Nil	Nil	2-4	1-2	Pale yellow	Round shape	Nil	Nil	Normal
19	H54585	36	Nil	Nil	Nil	1-2	4-5	Colourless, notclear, cloudy appearance	Round shape	Nil	Nil	Normal	Nil	Nil	Nil	1-2	2-3	Pale yellow	Pearl shape	Nil	Nil	Normal
20	H43707	42	Nil	Nil	Nil	1-2	1-2	Colourless, clear	Pearl shape	Nil	Nil	Normal	Nil	Nil	Nil	3-5	2-4	Yellow colour	Round shape	Nil	Nil	Normal

Before and After treatment 21-40

BEFORE TREATMENT													AFTER TREATMENT										
S.NO	OP. No	Age / sex	Alb	Sugar		Deposit		Neerkuri	Neikuri	BS	BP	Uro.Bili	Alb	Sugar		Deposit		Neerkuri	Neikuri	BS	BP	Uro.Bili
				FA	PP	Puscells	Epi cells							FA	PP	Puscells	Epi cells					
21	H36057	37	Nil	Nil	Nil	1-3	1-3	Pale yellow, clear	Pearl shape	Nil	Nil	Normal	Nil	Nil	Nil	1-2	1-2	Pale yellow, clear	Pearl shape	Nil	Nil	Normal
22	H44770	42	Nil	Nil	Nil	10-12	12-16	Pale yellow, cloudy	Pearl shape	Nil	Nil	Normal	Nil	Nil	Nil	1-2	1-2	Pale yellow, clear	Pearl shape	Nil	Nil	Normal
23	H41386	20	Nil	Nil	Nil	2-4	2-4	Colourless, clear	Pearl shape	Nil	Nil	Normal	Nil	Nil	Nil	2-4	1-2	Pale yellow	Round shape	Nil	Nil	Normal
24	H45383	34	Nil	Nil	Nil	2-4	3-5	Yellow colour	Pearl shape	Nil	Nil	Normal	Nil	Nil	Nil	1-2	1-2	Pale yellow	Pearl shape	Nil	Nil	Normal
25	H45740	45	Nil	Nil	Nil	2-4	2-4	Colourless, notclear, cloudy appearance	Irregular shape, moderaters spread	Nil	Nil	Normal	Nil	Nil	Nil	2-3	1-2	Colourless, clear	Semi circle, slowly spread	Nil	Nil	Normal
26	H36248	30	Nil	Nil	Nil	1-2	4-5	Colourless, clear	Semi circle, slowly spread	Nil	Nil	Normal	Nil	Nil	Nil	6-7	1-2	Colourless, clear	Pearl shape	Nil	Nil	Normal
27	H45524	26	Nil	Nil	Nil	1-2	1-2	Pale yellow	Round shape	Nil	Nil	Normal	Nil	Nil	Nil	2-4	2-4	Pale yellow depo	Round shape	Nil	Nil	Normal
28	H48435	43	Nil	Nil	Nil	2-4	1-2	Pale yellow, clear	Pearl shape	Nil	Nil	Normal	Nil	Nil	Nil	1-2	1-2	Pale yellow, clear	Pearl shape	Nil	Nil	Normal
29	H49348	42	Nil	Nil	Nil	2-4	2-4	Yellow colour	Pearl shape	Nil	Nil	Normal	Nil	Nil	Nil	2-4	2-4	Pale yellow	Sieve pattern	Nil	Nil	Normal
30	H43321	40	Nil	Nil	Nil	3-5	2-4	Colourless, clear	Bean shape	Nil	Nil	Normal	Nil	Nil	Nil	1-2	2-3	Pale yellow	Round shape	Nil	Nil	Normal
31	H51792	39	Nil	Nil	Nil	3-5	4-6	Lemon yellow	Round shape	Nil	Nil	Normal	Nil	Nil	Nil	2-4	1-2	Yellow colour	Pearl shape	Nil	Nil	Normal
32	H52099	25	Nil	Nil	Nil	2-3	2-3	Pale yellow	Pearl shape	Nil	Nil	Normal	Nil	Nil	Nil	1-2	2-3	Colourless, clear	Round shape	Nil	Nil	Normal
33	H51847	40	Nil	Nil	Nil	2-4	2-4	Pale yellow	Sieve pattern	Nil	Nil	Normal	Nil	Nil	Nil	3-5	2-4	Pale yellow	Pearl shape	Nil	Nil	Normal
34	H50801	23	Nil	Nil	Nil	20-25	1-3	Pale yellow	Round shape	Nil	Nil	Normal	Nil	Nil	Nil	6-7	1-2	Colourless, clear	Pearl shape	Nil	Nil	Normal
35	H55764	42	Nil	Nil	Nil	2-4	1-2	Yellow colour	Round shape	Nil	Nil	Normal	Nil	Nil	Nil	2-4	2-4	Pale yellow depo	Round shape	Nil	Nil	Normal
36	H54407	45	Nil	Nil	Nil	2-4	2-4	Colourless, notclear, cloudy appearance	Pearl shape	Nil	Nil	Normal	Nil	Nil	Nil	1-2	1-2	Pale yellow, clear	Pearl shape	Nil	Nil	Normal
37	H19379	45	Nil	Nil	Nil	3-5	2-4	Colourless, clear	Pearl shape	Nil	Nil	Normal	Nil	Nil	Nil	2-4	2-4	Pale yellow	Sieve pattern	Nil	Nil	Normal
38	H16543	27	Nil	Nil	Nil	3-5	4-6	Pale yellow	Bean shape	Nil	Nil	Normal	Nil	Nil	Nil	1-2	2-3	Pale yellow	Round shape	Nil	Nil	Normal
39	H19642	39	Nil	Nil	Nil	2-3	2-3	Pale yellow, clear	Round shape	Nil	Nil	Normal	Nil	Nil	Nil	2-4	1-2	Yellow colour	Pearl shape	Nil	Nil	Normal
40	G92380	38	Nil	Nil	Nil	2-4	2-4	Yellow colour	Pearl shape	Nil	Nil	Normal	Nil	Nil	Nil	1-2	2-3	Colourless, clear	Round shape	Nil	Nil	Normal

DISCUSSION

DISCUSSION

The main aim of the treatment is to evaluate the therapeutic effect of the trial drug Perumpadukku Pittu(internal) in the disease PITHA PERUMPADU.
The present study is a preliminary case study of which 40 cases were selected according to the clinical features mentioned in Yugi Vaidhya Chinthamani[1]. Siddha method of diagnosis was carried out for all the patients and also modern investigations were done as per the protocol.

The clinical features of Pitha Perumpadu of can be correlated with Dysfunctional Uterine Bleeding(DUB) in Modern science.As per yougi vathiya chinthamani[1] text, Pitha Perumpadu is charecterised by Excessive menstrual bleeding ,Low Abdominal pain,Nausea,vomiting,tenderness in vagina.

Institutional ethical committee clearance was obtained for this study[IEC approved no: NIS/IEC/8-14/5-26-08-2014].

The safety of the trial drug usage and standardization of the trial drug through biochemical analysis were also ensured during the study.

The drug "PERUMPADUKKU PITTU possess Anti-menorrhagic activity.
as per Siddha literature Athmarachamirtham ennum vaithiya sarasangirdam, Editor.Dr.kandasamymudhaliyar-sep2011[2].

As per Standard operative procedure the drug was prepared at Gunapadam Lab in NIS,
Medicine Name : PERUMPADUKKU PITTU
Dose :30 gms (four times a day) after food.
Duration : 6 days medicine for consecutive 2 menstrual cycle

Haematological and Urine analysis were done for the patients at NIS laboratory before the treatment as well as after the treatment.

The drug was subjected to qualitative biochemical analysis in biochemistry laboratory at NIS.

The clinical study was conducted with a well defined protocol and a proper proforma after the approval of the Institutional Ethical Committee (IEC).

After the screening of 75cases reporting at the OPD of department of Maruthuvam,50 cases were inducted to the trial .Before enrollment to the trial the informed consent was obtained from the patients.

The patient were treated for a period of 6 days with PERUMPADUKKU PITTU.(internal) at the dose of 30 gms (four times a day) after food for consecutive 2 menstrual cycle

Clinical assessment was done during each visit in OPD patients(6 days once) and the data were noted in the prescribed proforma.

After the screening of more than 75 cases ,50 cases are shortlisted and among them 40 cases were diagnosed to have Pitha Perumbadu.All the cases were seen in OPD of Ayothidoss Pandithar Hospital ,National Institute of Siddha,Chennai-47

Incidence with reference to age disribution:

Among 40 cases, 8 cases(20%) were in age group 19-25, 6 cases(20%) were in age group 26-30,5 cases(12%) were in age group 31-35, 5 cases(12%) were in age group 36-40, 16 cases(40%) were in age group 41-45.

From this study It is observed that the disease occurs only after the age of 30 years.

Incidence with reference to food habits:

According to **Yugi literature[1]** heavy intake of animal foods leads to Pitha perumpadu.Non vegetarian**(93%)** are more prone to Pitha Perumbadu than vegetarians**(7**%).In the author study 93% of the cases are Non vegetarian.

Incidence with reference to family history;

Out of 40 cases, 75% of cases had no positive family history for Dysfunctional Uterine bleeding, 25% of cases related with family history.

Incidence with reference to Occupational status:

Out of 40 cases, 18(45%)working people, 19(47%) non-working people. 3 (8%) are student. There is no major difference in the occupational status But the severity of the disease increased due to heavy work.

Incidence with reference to yaakkai:

25 %(10) cases were vathapitha thegi, 50%(20) cases were Pitha thegi, 7.5 %(3) cases were pithavatha thegi, 7.5%(3) cases were pithakaba thegi, 20%(8) cases were kabavatha thegi, 5%(2) cases were kabapitha thegi.Among 40 cases 65% of the cases are belong to the Pitham.

Incidence with reference to kosangal:

Pranamayakosam (mild dyspnoea) was affected in 50% of cases , Vignanamayakosam was affected in 37.5 % of cases. Anandhamayakosam(Excessive menstrual bleeding)) was affected in all cases.

Incidence with reference to Ezhu udal thathukkal:

In Udal Thathukkal, Saarm (general tiredness) was affected in 40 cases(100%) & Chenneer (altered blood Hb level) was affected in all cases.Oon(muscular pain) affected in 25 cases(62.5%) Kozhuppu (obesity) was affected in 25% (10) of cases. Enbu (joint pain) was affected in 37.5% (15) of cases.Suronitham (Increased menstrual bleeding) was affected in 100 %(40) of cases.

Incidence with reference to vatham:

Pranan(Mild dyspnoea present) was affected in 50% cases.Abanan (excessive menstrual bleeding) was affected in 100% cases.Udhanan(tiredness) was affected in 88% cases. Viyanan(Pain present in the upper &lowerlimb) was affected in 38% cases. Samanan was affected in 100%. Kirukaran (polyphagia)was affected in 13% cases and Nagan (burning sensation present in both eyes) was affected in 8% cases and Devathaththan (tiredness,anxity) was affected in 100% cases. Koorman was affected in 2.5%cases.

Incidence with reference to pitham:

Among 40 cases Saathaga pittham(general tiredness) was affected in 90%(36) cases. Anal pittham(Increased appetite) was affected in 90% of cases(36). Ranjaga pitham(Altered blood sugar) was affected in 12.5%(5) cases, Pirasaga pittham(Dryness of skin) was affected in 12.5% cases(5). Aalosaga pitham(dullness of vision) was affected in 15% of cases(6).

Incidence with reference to kabham:

Avalambagam(breathing difficulty) was affected in 50%(20 cases), kilethagam (increased appetite) was affected in 5% (2 cases),Pothagam was affected in25%(10 cases),

Tharpagam(dullness of vision) affected in12.5%.(5 cases) Santhigam(Joint pain) was affected in 37.5%(15).

Incidence with reference to Naadi:

In NAADI 35% of cases were vali azhal, 8% of cases are azhal iyyam, 57% of cases were Azhal vali.

Incidence with reference to Neerkuri,Neikuri:

In Ennvagai thervugal oil in urine(Neikuri) was slowly spreaded in 55%cases.fastly spreaded in 45% cases. Neikuri revealed that 32.5%(13) cases had vaathaneer. 14 cases (35 %) had pithaneer, 9 cases (22.5 %) had kabaneer, and 4(10%) cases had other fashions.

Incidence with reference to clinical manifestation:

FIRST MENSTRUAL CYCLE : 100%

(40 cases) patients complained of menorrhagia &it was reduce to 57.5% (23 cases) and 45% (18 cases)patients complained of large blood clots & it was reduce to22.5%(9cases)and 37.5% (15 cases)patients complained of Dysmenorrrhoea & it was reduce to 5%(2cases) and 5% (2 cases) patients complained of vaginal tenderness & there was no improvement.

SECOND MENSTRUAL CYCLE : 100% (40 cases) patients complained of menorrhagia &it was reduce to 70% (28 cases) and30% (12 cases) patients complained of large blood clots & it was reduce to 12.5%(5cases) and 37.5% (15 cases) patients complained of Dysmenorrrhoea & it was reduce to 7.5%(3cases) and 2.5% (1 case) patients complained of tenderfull vagina & there was no improvement.

Bio-chemical study:

Presence of **tannin** in the medicine is mainly exhibits the

Anti menorrhagic action.

Presence of **iron** maintain & improve the Hemoglobin level during menstruation.

Presence of **chloride** is needed to maintain the body's acid base balance..As one of the mineral electrolytes, chloride works closely with sodium and water to help the distribution of body fluids. Chloride may also be helpful in allowing the liver to clear waste products.

OUTCOME:

With the evidence of statistical report, It showed that the significant clinical improvement (Arresting /Reduction of menstrual blood flow) with the percentage of 91.5% ($p<0.0003$)was observed at the end of the first menstrual cycle.

It was also observed at second menstrual cycle with significant clinical improvement of 93.5 %($p<0.0001$) .

Significant degree of clinical improvement between 1^{st} menstrual cycle and 2^{nd} menstrual cycle was observed which was increased with the percentage of 12% ($p<0.0001$).

From the comparison between the two age group[above 30& below 30], significant clinical response was better among the age group above 30 years than below 30 years ($P<0.0021$).

SUMMARY

SUMMARY

- This study has been approved by IEC of NIS [IEC approved no: NIS/IEC/8-14/5-26-08-2014].
- The clinical study on PITHA PERUMBADU with reference to its etiology, pathogenesis, investigations, clinical features, diagnosis and treatment were conducted at the department of Maruthuvam, Ayothidoss Pandithar Hospital, National Institute of Siddha, Chennai – 47.
- The required raw drugs for the preparation of PERUMPADUKKU PITTU (internal) and were purchased from Kaveri farm in Virudhachalam and the raw drugs were authenticated by Medicinal Botany Asst Prof Dr.Aravind in NIS.
- The medicine were prepared by the Author in the Gunapadam practical laboratory of National Institute of Siddha

- 50 cases of female with the signs and symptoms of Pitha Perumpadu were recruited in the age group within 19 to 45 for the study.40 cases were treated in the Out- Patient Department for 6 days for consecutive 2 menstrual cycle at the time of menstruation with the trial drugs.
- All the details about the study and the drugs were informed to the patients in their vernacular language, dietary regimen and information sheet were given to them and signed consent forms were obtained from them. Before starting the treatment, the blood samples of the selected patients were subjected to clinical laboratory and all the patients were subjected to USG whole Abdomen scan.
- The patients were treated for a period of 6 days for consecutive 2 menstrual cycle at the time of menstruation.The trial medicine selected for internal treatment as per Siddha literature Athmarachamirtham ennum vaithiya sarasangirdam.EditorDr.kandasamymudhaliyar-sep2011[2]

Clinical assessment was done during each visit in OPD patients(6 days once) and the data was noted in the prescribed proforma.

Required lab investigation were carried out before and after treatment and the concerned data was recorded in the proforma

During the study period there was no event of any adverse reactions owing to the drug and disease.

As per Siddha materia medica the ingredients of the trial drug were found to posses Anti Menorrhagic action.

The biochemical study of the trial drug reveals the presence of Tannin, iron , reducing sugar, etc.

With the evidence of statistical report, It showed that the significant clinical improvement (Arresting /Reduction of menstrual blood flow) with the percentage of 91.5% ($p<0.0003$)was observed at the end of the first menstrual cycle.

It was also observed at second menstrual cycle with significant clinical improvement of 93.5 %($p<0.0001$) .

Significant degree of clinical improvement between 1^{st} menstrual cycle and 2^{nd} menstrual cycle was observed which was increased with the percentage of 12% ($p<0.0001$).

From the comparison between the two age group[above 30& below 30], significant clinical response was better among the age group above 30 years than below 30 years ($P<0.0021$).

CONCLUSION

CONCLUSION

In Siddha system of medicine many medicines are found tobe good for Pitha perumpadu.Among these medicines Perumpaduku pittu is one of the best medicine to arrest/reduce the bleeding in Dysfunctional Uterine Bleeding.

Perumpadukku Pittu is undoubtly proved that it does not produced any harmful side effects.

With the evidence of statistical report, It showed that the significant clinical improvement (Arresting /Reduction of menstrual blood flow) with the percentage of 91.5% ($p<0.0003$)was observed at the end of the first menstrual cycle.

It was also observed at second menstrual cycle with significant clinical improvement of 93.5 %($p<0.0001$) .

Significant degree of clinical improvement between 1^{st} menstrual cycle and 2^{nd} menstrual cycle was observed which was increased with the percentage of 12% ($p<0.0001$).

From the comparison between the two age group[above 30& below 30], significant clinical response was better among the age group above 30 years than below 30 years ($P<0.0021$).

ANNEXURES

PROFORMA

NATIONAL INSTITUTE OF SIDDHA, CHENNAI – 47
AYOTHIDOSS PANDITHAR HOSPITAL
DEPARTMENT OF MARUTHUVAM

A CLINICAL STUDY ON "PITHA PERUMBADU" (DYSFUNCTIONAL UTERINE BLEEDING) AND

THE DRUG OF CHOICE IS "PERUMPADUKU PITTU" (INTERNAL)

FORM I - SCREENING AND SELECTION PROFORMA

OP NO: NAME: …… AGE: ……GENDER: …

OCCUPATION: ……

ADDRESS:

CONTACT NO:

INCLUSION CRITERIA

- Age: 19-45 Years Yes/No
- Patient Having The Symptoms Of Increased Menstrual Bleeding. Yes/No
- .Blood Clots Seen In The Mensus Bleeding Yes/No
- Patient Willing To Undergo Routine Blood Investigation. Yes/No
- Patient Willing To Participate In Trial And Signing In ConsentForm. Yes/No
- Patient Willing To takeUSG_Abdomen(To Rule Out The Fibroid Etc) Yes/No

EXCLUSION CRITERIA:

- History of hypertension Yes / No
- History of diabetes mellitus Yes / No
- History of cardiac disease Yes / No
- Pregnancy and lactation Yes / No
- History of thyroid dysfunction Yes / No
- History of recent hormone therapy (Past one year) Yes / No
- History of Fibroid Uterus Yes/No
- History of Endometriosis Yes/No
- History of Adenomyosis Yes /No

- History of Cancer Uterus Yes/No
- History of Endometritis Yes/No

ADMITTED TO TRIAL
YES ☐ NO ☐

If Yes Serial NO: ☐☐

Date:

Station:

Signature of the Investigator:

Signature of the Lecturer : Signature of H.O.D

NATIONAL INSTITUTE OF SIDDHA, CHENNAI – 47
AYOTHIDOSS PANDITHAR HOSPITAL
DEPARTMENT OF MARUTHUVAM

CLINICAL STUDY ON "PITHA PERUMPADU" (DYSFUNCTIONAL UTERINE BLEEDING) AND

THE DRUG OF CHOICE IS "PERUMPADUKU PITTU" (INTERNAL)

FORM II- CASE RECORD FORM

1. STUDY NO ---------- 2. OP/IP NO ---------- REG NO:

3. NAME ---------- 4. . Age (years): _____ Height: ____ m Weight: _____ Kg

5. Educational Status:

1) Literate ☐ 2) Illiterate ☐

6. Occupation:

7. Marital Status: 1.Married ☐ 2 .Unmarried ☐

If married; Gravidity ☐ Parity ☐

Dyspareunia - Present ☐ Absent ☐

8. Complaints and Duration:

_____

_____

_____

MENSTURAL AND OBSTETRIC HISTORY

1. Age at menarche _____ year

2. Regularly of cycle Regular ☐ Irregular ☐

3. Length of cycle [Days]

4. Duration of flow [Days]

5. Level of flow Low ☐ Moderate ☐ Heavy ☐

6. LMP

7. Passage of big clots Yes / No

8. Dysmenorrhoea started at age _____ years

9. Onset of abdominal pain

Starts at the time of menstruation Prior by _____ hours ☐

At that time ☐

After _____ hours ☐

10. Presence of abdominal pain other than around the time of menstruation

1. Yes ☐ 2.No ☐

12. Drug history: H/O Previous hormonal therapy 1. Yes ☐ 2.No ☐

MEDICAL/SURGICAL HISTORY

Diabetes mellitus:	1.Yes ☐	2.No ☐
Thyroidism:	1.Yes ☐	2.No ☐
Whether epileptic?	1. Yes ☐	2.No ☐
Whether asthmatic?	1. Yes ☐	2.No ☐
Presence of cardiac/renal problem	1. Yes ☐	2.No ☐
Fibroid uterus	1.Yes ☐	2.No ☐
Uterus carcinoma	1.Yes ☐	2.No ☐
Endometriosis/Endometritis	1.Yes ☐	2.No ☐

FAMILY HISTORY

Whether this problem runs in family? 1. Yes ☐ 2.No ☐

If yes, mention the relationship of affected person(s)

1._____

2._____

3._____

DIETARY STYLE

1.Pure vegetarian ☐ 2.Non-vegetarian ☐

BOWEL HABITS & MICTURITION:

History of habitual constipation 1.Yes ☐ 2.No ☐

History of frequent diarrhoea 1.Yes ☐ 2.No ☐

History of frequent dysuria 1.Yes ☐ 2.No ☐

7. THEGI: [TYPE OF BODY CONSTITUTION]

Vatham predominant		Kabam predominant	
Pitham predominant		Thondha udal	

8. NILAM: [LAND WHERE PATIENT LIVED MOST]

Kurinji ☐ Mullai ☐ Marutham ☐ Neithal ☐ Palai ☐

(Hilly terrain) (Plains) (Coastal belt) (Aridregions) (Forest range)

9. KAALAM:[SEASON]

Kaarkalam ☐ Pinpanikalam ☐

Koothirkalam ☐ Ilavenil ☐

Munpanikalam ☐ Muthuvenil ☐

10. GUNAM:[CHARACTER]

Sathuvam ☐ Rasatham ☐ Thamasam ☐

DAY OF ASSESSMENT :

FIRST VISIT MENSTRUAL PHASE		SECOND VIST MENSTRUAL PHASE	
0^{th} day		0 th day	
6^{th} day		6 th day	
12^{th} day		12 th day	.

SIDDHA SYSTEM OF EXAMINATION:

1. ENVAGAI THERVU: [EIGHT-FOLD EXAMINATION]

I.NAADI: [PULSE PERCEPTION]

	1^{st} visit menstrual phase			**2^{nd} visit menstrual phase**			
	0^{th} day	**6^{th} day**	**12^{th} day**	**0^{th} day**	**6^{th} day**	**12^{th} day**	**90^{th} day**
Date							
Vali							
Azhal							
Iyyam							
Vali Azhal							
Azhal vali							
Iyya vali							
Vali Iyyam							
Azhal Iyyam							
Iyya Azhal							

II.NAA:[TONGUE]

	1^{st} visit menstrual phase			**2^{nd} visit menstrual phase**			
	0^{th} day	**6^{th} day**	**12^{th} day**	**0^{th} day**	**6^{th} day**	**12^{th} day**	**90^{th} Day**
Date							
Colour	normal/ Red pale/yellow	normal/ Red pale/yellow	normal/ Red pale/yellow	normal/ Red pale/yellow	normal/ Red pale/yellow	normal/ Red pale/yellow	normal/ Red pale/yellow
Taste	Sweet/Sour/ Pungent/ Bitter/None	Sweet/Sour/ Pungent/ Bitter/None	Sweet/Sour/ Pungent/ Bitter/None	Sweet/Sour/ Pungent/ Bitter/None	Sweet/Sour/ Pungent/ Bitter/None	Sweet/Sour/ Pungent/ Bitter/None	Sweet/Sour/ Pungent/ Bitter/None

Coating	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent
Fissure	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent
Saliva	Normal/ Increased/ Decreased	Normal/ Increased/ Decreased	Normal/ Increased/ Decreased	Normal/ Increased/ Decreased	Normal/ Increased/ Decreased	Normal/ Increased/ Decreased	Normal/ Increased/ Decreased
Dryness	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent
Glossitis	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent
Baldness	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent

III.NIRAM: [COMPLEXION]

1st visit menstrual phase			2nd **visit menstrual phase**			**90th Day**
0th day	**6th day**	**12th day**	**0th day**	**6th day**	**12th day**	
Date						
Dark/pale/ Yellow tinted/ wheatish brown	Dark/pale/ Yellow tinted/ wheatish brown	Dark/pale/ Yellow tinted/ wheatish brown	Dark/pale/ Yellow tinted/ wheatish brown	Dark/pale/ Yellow tinted/ wheatish brown	Dark/pale/ Yellow tinted/ wheatish brown	Dark/pale/ Yellow tinted/ wheatish brown

IV.MOZHI: [VOICE]

1st visit menstrual phase			2nd **visit menstrual phase**			
0th day	**6th day**	**12th day**	**0th day**	**6th day**	**12th day**	**90th Day**
Date						
Medium/ High/ Low pitched	Medium/ High/ Low pitched	Medium/ High/ Low pitched	Medium/ High/ Low pitched	Medium/ High/ Low pitched	Medium/ High/ Low pitched	Medium/ High/ Low pitched

V.VIZHI: [EYES] (Lower palpebral conjunctiva)

1st visit menstrual phase			2nd **visit menstrual phase**			
0th day	**6th day**	**12th day**	**0th day**	**6th day**	**12th day**	**90th Day**

Date						
normal/ Red pale/yellow	Normal/Red pale/yellow	normal/Red pale/yellow	normal/ Red pale/yellow	normal/ Red pale/yellow	normal/ Red pale/yellow	normal/Red pale/yellow

VI. MALAM:[BOWEL HABITS / STOOLS]

	1st visit menstrual phase			2nd **visit menstrual phase**			
	0th day	**6th day**	**12th day**	**0th day**	**6th day**	**12th day**	**90th Day**
Date							
Colour	Dark/pale/ yellow/ Red	Dark/pale/ yellow/ Red	Dark/pale/ Yellow/ Red	Dark/pale/ yellow/ Red	Dark/pale/ yellow/ Red	Dark/pale/ yellow/ Red	Dark/pale/ yellow/ Red
Consistency	Solid/ Semisolid/Watery	Solid/ Semisolid/Watery	Solid/ Semisolid/Watery	Solid/ Semisolid/Watery	Solid/ Semisolid/Watery	Solid/ Semisolid/Watery	Solid/ Semisolid/Watery
stool bulk	Normal/ Reduced	Normal/ Reduced	Normal/ Reduced	Normal/ Reduced	Normal/ Reduced	Normal/ Reduced	Normal/ Reduced
Constipation	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent
Diaarhoea	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent	

VII.MOOTHIRAM: [URINE EXAMINATION]

	1st visit menstrual phase			2nd **visit menstrual phase**			
Neerkkuri	**0th day**	**6th day**	**12th day**	**0th day**	**6th day**	**12th day**	**90th day**
Date							
Niram[Colour]	Yellow/ Red/ White/ Straw coloured/ Crystal clear	Yellow/ Red/ White/ Straw coloured/ Crystal clear	Yellow/ Red/ White/ Straw coloured/ Crystal clear	Yellow/ Red/ White/ Straw coloured/ Crystal clear	Yellow/ Red/ White/ Straw coloured/ Crystal clear	Yellow/ Red/ White/ Straw coloured/ Crystal clear	Yellow/ Red/ White/ Straw coloured/ Crystal clear
Manam[Odour]	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent
Nurai[Froth]	Nil/ Reduced/ Increased	Nil/ Reduced/ Increased	Nil/ Reduced/ Increased	Nil/ Reduced/ Increased	Nil/ Reduced/ Increased	Nil/ Reduced/ Increased	Nil/ Reduced/ Increased
Edai[Sp.gravit]	Normal/ Increased/ Reduced	Normal/ Increased/ Reduced	Normal/ Increased/ Reduced	Normal/ Increased/ Reduced	Normal/ Increased/ Reduced	Normal/ Increased/ Reduced	Normal/ Increased/ Reduced
Enjal[Deposits]	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent	Present/ Absent
Volume	Normal/ Increased/ Reduced	Normal/ Increased/ Reduced	Normal/ Increased/ Reduced	Normal/ Increased/ Reduced	Normal/ Increased/ Reduced	Normal/ Increased/ Reduced	Normal/ Increased/ Reduced

	1st visit menstrual phase			2nd visit menstrual phase			
Neikkuri	**0th day**	**6th Day**	**12th day**	**0th day**	**6th day**	**12th day**	**90th day**
Date							
Serpentine fashion	at___mints	at___ mints	at___ mints	at___ mints	at___ mints	at__mints	at__mints
Annular/Ringed fashion	at___mints	at___ mints	at___ mints	at___ mints	at___ mints	at__mints	
Pearl beaded fashion	at___mints	at___ mints	at___ mints	at___ mints	at___ mints	at__mints	at__mints
Mixed fashion	at___mints	at___ mints	at___ mints	at___ mints	at___ mints	at__mints	at__mints
Other fashion	at___mints	at___ mints	at___ mints	at___ mints	at___ mints	at__mints	at__mints

VIII. SPARISAM: [PALPATORY PERCEPTION]

1st visit menstrual phase			2nd visit menstrual phase			
0th day	**6th day**	**12th day**	**0th day**	**6th day**	**12th day**	**90th Day**
Date						
Warmth/Hot/ cold/ Sweat	Warmth/Hot/cold/ Sweat	Warmth/Hot /cold/ Sweat	Warmth/Hot/ cold/ Sweat	Warmth/Hot/ cold/ Sweat	Warmth/Hot/ cold/ Sweat	Warmth/Hot/ cold/ Sweat

2. **IYMPORIGAL:[SENSORY ORGANS]**

	1st visit menstrual phase			2nd visit menstrual phase			
	0th day	**6th day**	**12th day**	**0th day**	**6th day**	**12th day**	**90th Day**
Date							
	Normal/ Affected	**Normal/ Affected**	**Normal/ Affected**	**Normal/ Affected**	**Normal/ Affected**	**Normal/ Affected**	**Normal/ Affected**
Mei [Skin]							
Vaai[Buccal cavity]							
Kan [Eyes]							
Mooku[Nose]							
Sevi [ear]							

3. **IYMPULANGAL: [MOTOR ORGANS]**

	1st visit menstrual phase			2nd visit menstrual phase			
	0th day	**6th day**	**12th day**	**0th day**	**6th day**	**12th day**	**90th Day**
Date							
	Normal/ Affected	**Normal/ Affected**	**Normal/ Affected**	**Normal/ Affected**	**Normal/ Affected**	**Normal/ Affected**	**Normal/ Affected**

Kai [upperlimb]							
Kal [lowerlimb]							
Vai[Buccal cavity]							
Eruvai [excretory organ]							
Karuvai[Reporduc-tive organ]							

4,KOSAM: [SHEATHS]

	1st visit menstrual phase			2nd **visit menstrual phase**			
	0th day	**6th day**	**12th day**	**0th day**	**6th day**	**12th day**	**90thDay**
Date							
	Normal/ Affected	**Normal/ Affected**	**Normal/ Affected**	**Normal/ Affected**	**Normal/ Affected**	**Normal/ Affected**	**Normal/ Affected**
Annamaya kosam							
PranamayaKosam							
Manonmayakosam							
Vingyanamaya kosam							
Anandhamaya kosam							

5. MUKKUTRAM: [AFFECTION OF THREE HUMORS

A) VATHAM:

	1st visit menstrual phase			2nd **visit menstrual phase**			
	0th day	**6th day**	**12th day**	**0th day**	**6th day**	**12th day**	**90th Day**
Date							
	Normal/ Affected	**Normal/ Affected**	**Normal/ Affected**	**Normal/ Affected**	**Normal/ Affected**	**Normal/ Affected**	**Normal/ Affected**
Praanan							
Abaanan							
Samaanan							

Udhaanan							
Viyaanan							
Naahan							
Koorman							
Kirukaran							
Devathathan							
Dhananjeyan	.....	.....	.....	-----	-------	------	------

B. **PITHAM:**

	1st visit menstrual phase			2nd **visit menstrual phase**			
	0th day	**6th day**	**12th day**	**0th day**	**6th day**	**12th day**	**90th Day**
	Normal/ Affected	**Normal/ Affected**	**Normal/ Affected**	**Normal/ Affected**	**Normal/ Affected**	**Normal/ Affected**	**Normal/ Affected**
Date							
Analapitham							
Prasakam							
Ranjakam							
Aalosakam							
Saathakam							

C. KABAM:

	1st visit menstrual phase			2nd **visit menstrual phase**			
	0th day	**6th day**	**12th day**	**0th day**	**6th day**	**12th day**	**90th Day**
	Normal/ Affected	**Normal/ Affected**	**Normal/ Affected**	**Normal/ Affected**	**Normal/ Affected**	**Normal/ Affected**	**Normal/ Affected**
Date							
Avalambagam							
Kilethagam							
Pothagam							
Tharpagam							
Santhigam							

6. SEVEN DHATHUS: [SEVEN SOMATIC COMPONENTS]

	1st visit menstrual phase			2nd visit menstrual phase			
	0th day	**6th Day**	**12th day**	**0th day**	**6th day**	**12th Day**	**90th day**
Date							
	Normal/ Affected	**Normal/ Affected**	**Normal/ Affected**	**Normal/ Affected**	**Normal/ Affected**	**Normal/ Affected**	**Normal/ Affected**
Saaram[chyme]							
Senneer[Blood]							
Oon[Muscle]							
Kozhuppu[Fat]							
Enbu[Bones]							
Moolai[Bonemarrow]							
Sukkilam/Suronitham [Genital discharges]							

7. SYSTEMIC EXAMINATION:

	1st visit menstrual phase			2nd visit menstrual phase			
	0th day	**6th day**	**12th day**	**0th day**	**6th day**	**12th Day**	**90th Day**
Date							
CardioVascular System							
Respiratory System							
Gastrointestinal System							

8. GENERAL EXAMINATION:

	1st visit menstrual phase			2nd visit menstrual phase			
	0th day	**6th day**	**12th day**	**0th day**	**6th day**	**12th Day**	**90th Day**
Date							
Height (cms)							
Weight (kg)							
Temperature(°F)							
Pulse rate (per min)							
Heart rate (per min)							

Respiratoryrate(per min)							
Blood pressure(mm/Hg)							
Pallor							
Jaundice							
Cyanosis							
Lymphadenopathy							
Pedal edema							
Clubbing							
Jugular vein pulsation							

9. CLINICAL SYMPTOMS:

	1st visit menstrual phase			2nd **visit menstrual phase**			
	0th day	**6th day**	**12th day**	**0th day**	**6th day**	**12th Day**	**90th Day**
Date							
Menorrhagia							
Dysmenorrhoea							
Large Blood clots							
Tenderfull vagina							

Date:

Station:

Signature of the Investigator:

Signature of the Lecturer: **Signature of the HOD**

NATIONAL INSTITUTE OF SIDDHA, CHENNAI – 47

AYOTHIDOSS PANDITHAR HOSPITAL
DEPARTMENT OF MARUTHUVAM

A CLINICAL STUDY ON "PITHA PERUMPADU" (DYSFUNCTIONAL UTERINE BLEEDING) AND THE DRUG OF CHOICE IS "PERUMPADUKU PITTU" (INTERNAL)

FORM III LABORATORY INVESTIGATION FORM

1. OP/IP No: _____ 2 .S. No: _____ 3.Reg no: 32111202/2013-14

BLOOD INVESTIGATION		Before treatment Date:	After treatment Date:	NORMAL VALUES
HB (gms %)				11-15
T.RBC(milli/cu.mm)				3.5-5.5
ESR (mm)	½ hr.			
	1 hr.			0-20
T.WBC (cu.mm)				4000-11,000
DIFFERENTIAL COUNT (%)	Polymorphs			40-75
	Lymphocytes			20-35
	Monocytes			2-10
	Eosinophils			1-6
	Basophils			0-1
Blood glucose (mg/dl)	Fasting			80-120
	PP			<130
	Random			<140
Lipid profile (mg/dl)	Serum cholesterol			150-250
	HDL			30-60
	LDL			Upto 130
	VLDL			40
	TGL			Upto 160
RFT (mg/dl)	Blood urea			16-50
	Serum creatinine			0.6-1.2
	Serum Uric acid			2.5-7.5
LFT (mg/dl)	Total bilirubin			0.2-1.2
	Direct bilirubin			0.1-1.2
	Indirect bilirubin			0.2-0.7
	Serum total protein			6-8
	Serum Albumin			3.5-5.5
	Serum globulin			2-3.5
	Serum fibrinogen			
	Serum calcium			9-11
	Serum phosphorous			2-5
	SGOT IU/L			0-40
	SGPT IU/L			0-35
	Alkaline phosphatase IU/L			80-290

Thyroid profile	Before treatment	After treatment

URINE INVESTIGATION

Urine investigation	Before TMT(with Date)	After TMT (With Date)
Albumin		
Fasting sugar		
PP sugar		
Random Sugar		
Deposits		
Bile salts		
Bile pigments		
Urobilinogen		

USG ABDOMEN

ENDOCARDIOGRAM

Specific Investigation

	Before treatment	After treatment
PBAC score		

Date:

Station:

Signature of the Investigator:

Signature of the Lecturer: Signature of the HOD

NATIONAL INSTITUTE OF SIDDHA, CHENNAI – 47, AYOTHIDOSS PANDITHAR HOSPITAL

DEPARTMENT OF MARUTHUVAM

A CLINICAL STUDY ON "PITHA PERUMPADU" (DYSFUNCTIONAL UTERINE BLEEDING) AND

THE DRUG OF CHOICEI "PERUMPADUKU PITTU" (INTERNAL)

FORM IV -DRUG COMPLIANCE FORM

S. NO: --------- OPD/IPD NO: ---------- NAME: ---------- REG NO: 32111202/2013-14

Name Of The Drug : PERUMPADUKU PITTU 30gms/four times a day After Food for 6 days

FIRST VISIT MENORRHAGIC PHASE OF MENSTRUAL CYCLE

	DATE	MORNING	AFTERNOON	EVENING	NIGHT
DAY 1					
DAY 2					
DAY 3					
DAY 4					
DAY 5					
DAY 6					

SECOND VISIT MENORRHAGIC PHASE OF MENSTRUAL CYCLE

	DATE	MORNING	AFTERNOON	EVENING	NIGHT
DAY 1					
DAY 2					
DAY 3					
DAY 4					
DAY 5					
DAY 6					

DATE: STATION:

SIGNATURE OF THE INVESTIGATOR:

SIGNATURE OF THE LECTURER: SIGNATURE OF H.O.D

NATIONAL INSTITUTE OF SIDDHA, CHENNAI – 47
AYOTHIDASS PANDITHAR HOSPITAL
DEPARTMENT OF MARUTHUVAM

A CLINICAL STUDY ON "PITHA PERUMPADU" (DYSFUNCTIONAL UTRINE BLEEDING) AND

THE DRUG OF CHOICE IS "PERUMPADUKU PITTU" (INTERNAL)
FORM V- PATIENT INFORMATION SHEET

Name of the Principal Investigator: Dr.P.Kamalasoundaram (PG Scholar)
Name of the Institution : National Institute of Siddha

TambaramSanatorium
Chennai-47.

I Dr.P.Kamalasoundaram studying M.D (Siddha) in National Institute of Siddha, Chennai. I am doing a clinical trial on the study of **PITHA PERUMBADU(Dysfunctional Uterine Bleeding).**Menorrhagia Is The Second Most Common Gynaecologial Condition Needs Hospitalization.1 In 20 Women Aged 30 Years To 40 Years Consult The Doctor For Increased Bleeding During Mensus 40% To 60% Of Those Who Complain Of Excessive Bleeding Have No Pathology Is Called DUB (Dysfunctional Uterine Bleeding).It includes the symptoms of increased bleeding in menstruation. This condition is being treated in NIS with many siddha formulations. As a part of M.D(S) research programme and developing new efficacious medicine, I have proposed to study the drug **Perumpaduku Pittu** for treating this condition. This formulation has been mentioned in siddha literature and empirical evidence with contemporary tools is required for documentation. You can receive medicines free of cost. The duration of treatment period is **3months**. You have to visit NIS 6 days once and collect drugs for **6 days.** The diagnosis tests will be carried out free of cost. However, a particular test **USG Abdomen** has to be taken from outside lab and charges to be borne by you. We will assess the effect of treatment after completion of **3months** of treatment using clinical and lab parameters.

In this regard, I need to ask you few questions. I will maintain confidentiality of your comments and data obtained from you. There will be no risk of disclosing your identity and no physical, psychological or professional risk is involved by taking part in this study.

Taking part in this study is voluntary. No compensation will be paid to you for taking part in this study. You can choose not to answer any specific question. There is no specific benefit for you if you take part in the study, but you will be under our clinical monitoring and specific attention will be given for your health. Taking part in the study may be of benefit to the community, as it may help us to develop medicine for Pitha Perumpadu. In case of any adverse symptoms like severe bleeding according to Pictorial Blood Assesssment Chart(PBAC)more than 300 during the treatment shall be reported to me and care will be taken in NIS for relief. You can withdraw from the study at the midst of treatment period, if you are not interested to continue and you will receive our usual treatment without condition.

The information collect in this study, will remain between you and me as a principal investigator. I will ask you a few questions through questionnaire. I will not write your name on different forms which sent to different investigating/analysis sections and I will use a code instead given by the principal investigator. Only the principal investigator will know the key to this code which will be kept in safe custody. If you agree to be a participant in this study, you will be screened as per the study protocol.

If you wish to find out more about this study before taking part, you can ask me all the questions you want or contact Dr.P.KAMALASOUNDARAM.PG Scholar principal investigator of this study, attached to the National Institute of Siddha, Chennai (Mobile phone no:9789042305). You can also contact the Chairman/Member-secretary of Ethics committee, National Institute of Siddha, Chennai – 600047, Tel no: 91-44-22411611, for rights and participation in the study.

§¾ºÇÂ ºÇò¾ ÁÕòÐÅ ¿¢ÚÅÉõ, ¦ºý¨É 47
«§Â¡ò¾¢¾¡º÷ ÀñÊ¾÷ ÁÕòÐÅÁ¨É

À¢ò¾¦ÀÕõÀ¡Î §¿¡öì¸¡É ºÇò¾ ÁÕó¾¢ý (¦ÀÕõÀ¡ÎìÌ À¢ðÎ) ÀÃ¢¸Ã¢ôÒò ¾¢È¨Éì ¸ñ¼È¢Õõ ÁÕòÐÅ ¬öÅ¢ü¸¡É ¾¸Åø ÀÊÅõ

FORM V- ¾¸Åø ÀÊÅõ

Ó¾ý¨Á ¬Ã¡öîº¢Â¡Ç÷ ¦ÀÂ÷ : Dr. À¡.¸ÁÄ¡¦ºÇó¾Ãõ
¿¢ÚÅÉò¾¢ý ¦ÀÂ÷ : §¾º¢Â ºÇò¾ ÁÕòÐÅ ¿¢ÚÅÉõ
¾¡õÀÃõ º¡Éð§¼¡Ã¢Âõ
¦ºý¨É 47

Dr.À¡.¸ÁÄ¡¦ºÇó¾Ãõ ¬¸¢Â ¿¡ý §¾º¢Â ºÇò¾ ÁÕòÐÅÁ¨ÉÂ¢ø Àð¼ §ÁüÀÊôÒ ÀÂ¢ýÚ ÅÕ¸¢§Èý. **À¢ò¾¦ÀÕõÀ¡Î** ±ýÛõ §¿¡Â¡ÉÐ Á¡¾Å¢¼¡ö ¸¡ÄÍ¸Ç¢ø «¾¢¸ ÌÕ¾¢§À¡ì¨¸ ²üÀÎòÐõ ´Õ §¿¡Â¡Ìõ. þó§¿¡Â¡ÉÐ Á¡¾Å¢¼¡Â¢ý ¦À¡ØÐ «¾¢¸ ÌÕ¾¢§À¡ìÌ, ¸ðÊ,¸ðÊÂ¡¸ Å¢Ø¾ø, ¯¼ø ¦ÅÙò¾ø §À¡ýÈ Ì¢Ì½í¸¨Çò §¾¡üÚÅ¢ìÎõ. þó§¿¡öìÌ §¾º¢Â ºÇò¾ ÁÕòÐÅÁ¨ÉÂ¢ø ÀÄ ºÇò¾ ÁÕóÐ¸û ÀÂýÀÎò¾ôÀðÎ ÅÕ¸¢ýÈÐ. ºÇò¾ ÁÕòÐÅ Àð¼ §ÁüÀÊôÀ¢ø, ¬öÅ¢ý ´Õ À¾¢Â¡¸ Ò¾¢Â ÁÕóÐ¸¨Ç ÀÂýÀÎòÐõ §¿¡ì¸¢ø **¦ÀÕõÀ¡ÎìÌ À¢ðÎ** ±ýÛõ ÁÕó¾¢¨É þó§¿¡öìÌ ÅÆí¸ ÀÃ¢óÐ¨Ã ¦ºö¸¢§È¡õ. þó¾ ÁÕó¾¢ý ¦ºöÓ¨È, «Ç×, «ÛÀ¡Éõ ÁüÚõ ÁÕòÐÅ ÀÂý¸û «¨ÉòÐõ «í¸£¸Ã¢ì¸ôÀð¼ º¢ò¾ ÁÕòÐÅ áÄ¢ø ÜÈôÀðÎûÇÐ. ±ó¾Å¢¾ ¸ð¼½ÓÁ¢ýÈ¢ ¾¡í¸û þó¾ ÁÕó¾¢¨É ¦ÀüÚì¦¸¡ûÇÄ¡õ. þó¾ ¬öÅ¢ø ÁÕóÐ ¯ð¦¸¡ûÙõ ¸¡Äõ **3 Á¡¾í¸û** ¬Ìõ. 6 ¿¡û¸Ùì¦ ´ÕÓ¨È §¾º¢Â º¢ò¾ ÁÕòÐÅÁ¨ÉìÌ §¿Ã¢ø ÅóÐ ÁÕó¾¢¨É ¦ÀüÚì¦¸¡ûÇ §Åñîõ. þó¾ ¬ö× ºõÀó¾Á¡É ¬öÅ¸ ÀÃ¢§º¡¾¨É¸û ¸ð¼½Á¢ýÈ¢ ¦ºöÂôÀÎõ. §ÁÖõ þó§¿¡öì¸¡É, ÌÈ¢ôÀ¢ð¼ **USG ABDOMEN** ÀÃ¢§º¡¾¨É ¦ÅÇ¢ ¬ö×ìÜ¼ò¾¢ø ¾í¸û ¦ºÄÅ¢§Å§Å ¦ºöÐ ¦¸¡ûÇ §ÅñîÕ. 3 Á¡¾í¸û ÁÕóÐ ¯ð¦¸¡ûÙõ ¸¡Äõ ÓÊó¾ À¢ÈÌ §¿¡öì¸¡É ÌÈ¢Ì½í¸û ÁüÚõ ¬öÅ¸ ÀÃ¢§º¡¾¨É¸û þÅüÈ¢ý ÓÊ×¸Ç¢ý «ÊôÀ¨¼Â¢ø ÁÕó¾¢ý ÀÃ¢¸Ã¢ôÒò¾¢Èý ¸ñ¼È¢ÂôÀÎõ.

þó¾ ¬ö× ºõÀó¾Á¡ º¢Ä §¸ûÅ¢¸¨Ç ¾í¸Ç¢¼õ §¸ð¸ þÕì¸¢§Èý. ¾í¸Ç¢¼Á¢ÕóÐ ¦ÀÈôÀÎõ ¸ÕòÐì¸û ÁüÚõ ÌÈ¢ôÒ¸û «¨ÉòÐõ ¿õÀ¢ì¨¸Âì¸ À¾¢× ¦ºöÂôÀÎõ.þó¾ ¬öÅ¢ø ¾í¸¨Ç ¯ðÀÎò¾¢ì¦¸¡ûÅ¾¢ý ãÄõ ±ó¾ Å¨¸Â¢ÖõÀ¡¾¢ôÒìÌûÇ¡¸ Á¡ðË÷¸û ±É ¯Ú¾¢ «Ç¢ì¸¢§Èý.

±ó¾Å¢¾ ÅüÒÚò¾ÖÁ¢ýÈ¢, þó¾ ¬öÅ¢ø Àí§¸ü¸×õ, þó¾ ¬ö× ºõÀó¾Á¡ §¸ð¸ôÀÎõ §¸ûÅ¢¸ÙìÌ À¾¢ø ÜÈ×õ ¾í¸ÙìÌ ÓØ Í¾ó¾¢Ãõ «Ç¢ì¸ôÀÎ¸¢ÈÐ. þó¾ ¬öÅ¢ø Àí§¸üÀ¾üÌ ±ó¾ ºýÁ¡ÉÓõ ÅÆí¸ôÀ¼Á¡ð¼¡Ð. ¬É¡ø, ¬ö× ÓØÅÐõ ±ÉÐ §ÁüÀ¡÷¨ÅÂ¢Öõ, ¾í¸û ¯¼ø¿Äý ÌÈ¢ò¾ ¾É¢ ¸ÅÉò¾¢Öõ ¬ö× §Áü¦¸¡ûÇôÀÎõ. ¦¸÷ôÀ Å¡Ô §¿¡öì¸¡É Ò¾¢Ã ÁÕó¾¢ý ÀÃ¢¸Ã¢ôÒò¾¢È¨É ºã¸ò¾¢üÌ ¯½÷òÐõ Å¨¸Â¢ø þó¾ ¬ö× §Áü¦¸¡ûÇôÀÎ¸¢Ð. þó¾ ¬öÅ¢ø, ÁÕóÐ ¯ð¦¸¡ûÙõ ¸¡Äò¾¢ø º¢ÄÕÌ«¾¢¸ ÌÕ¾¢§À¡ìÌ (PBAC score->300), ¾í¸¡ÓÊÂ¡¾ ÅÂ¢üÚ ÅÄ¢ §À¡ýÈ Á¡ÚÀð¼ ÌÈ¢Ì½í¸û ¦¾¡¼¡÷óÐ þÕÌìõ Àðºò¾¢ø, Ó¾ý¨Á ¬Ã¡öîº¢Â¡ÇÃ¡É ±ýÉ¢¼õ ¦¾Ã¢Å¢ì¸ôÀðÎ, §¾º¢Â º¢ò¾ ÁÕòÐÅÁ¨ÉÂ¢ø «¾üì¸¡É ¾£÷× ÅÆí¸ôÀÎõ. þó¾ ¬öÅ¢¨Éò ¦¾¡¼Ã ¾í¸ÙìÌ Å¢ÕôÀõ þø¨Ä¦ÃÉ¢ø, ±ô¦À¡ØÐ §ÅñîÁ¡ÉÕõ ¬öÅ¢ý þ¨¼Â¢ø Å¢Ä¸¢ì¦¸¡ûÇ×õ, þõÁÕòÐÅÁ¨ÉÂ¢ø ÅÆí¸ôÀÎõ þó§¿¡öì¸¡É ÅÆì¸Á¡É ÁÕóÐ¸¨Ç ¦ÀüÚì¦¸¡ûÇ×õ «È¢×Úò¾ôÀÎ¸¢È£÷¸û.

þó¾ ¬öÅ¢ø §º¸Ã¢ì¸ôÀÎõ Å¢ÀÃí¸û «¨ÉòÐõ ¾í¸ÙìÌõ Ó¾ý¨Á ¬Ã¡öîº¢Â¡ÇÃ¡É ±ÉìÌõ þ¨¼Â¢ø þÃ¸º¢ÂÁ¡ ¨Åì¸ôÀÎõ. §¸ûÅ¢ À¾¢ø ÅÊÅò¾¢ø ¾í¸Ç¢¼õ §¸ûÅ¢¸û §¸ð¸ôÀÎõ. «¨ÉòÐõ ÀÊÅí¸Ç¢Öõ ¾í¸Ç¢ý ¦ÀÂ÷ ¾Å¢÷ì¸ôÀðÎ ¬öÅ¡ÇÃ¡ø ¾í¸Ùì¦¸É ¾É¢ì ÌÈ¢Â£Î ÅÆí¸ôÀÎõ. «ó¾ì ÌÈ¢Â£Î ¬öÅ¡ÇÕìÌ ÁðÎ§Á ¦¾Ã¢ó¾¾¡¸ þÕìÌõ. ¿£í¸û þó¾ ¬öÅ¢ø Àí§¸ü¸ Å¢ÕôÀôÀð¼¡ø, ¾¢ð¼ Ä¨Ã× ÀÊ §¾÷× ¦ºöÂôÀÎÅ£÷¸û.

¿£í¸û þó¾ ¬öÅ¢ø Àí§¸üìõ Óý, þó¾ ¬öÅ¢¨Éô ÀüÈ¢Â §ÁÖõ Å¢ÀÃí¸û ¦ÀÈ §ÅñÎ¦ÁÉ Å¢ÕôÀôÀð¼¡ø, þó¾ ¬öÅ¢ý Ó¾ý¨Á ¬Ã¡öîº¢Â¡Ç÷ ÁüÚõ §¾º¢Â º¢ò¾ ÁÕòÐÅÁ¨É, Àð¼ §ÁüÀÊôÒò¨È Á¡½Å÷ Dr.À¡.¸ÁÄ¡¦ºÇó¾Ãõ ¬¸¢Â ±ý¨É 9789042305 ±ýÈ ±ñ½¢ø ¦¾¡¼÷Ò ¦¸¡ûÇÄ¡õ. §ÁÖõ, ¿£í¸û þó¾ ¬öÅ¢ø, ¯í¸ÇÐ Àí§¸üÒ ÁüÚõ ¯Ã¢¨Á ÀüÈ¢ ¦¾Ã¢óÐ ¦¸¡ûÇ §¾º¢Â º¢ò¾ ÁÕòÐÅÁ¨É, ¾¨ÄÅ÷/¦ºÂüìÌØ ¯ÚôÀ¢É÷ «Å÷¸¨ÇÕõ 91-44-22411611 ±ýÈ ±ñ½¢ø ¦¾¡¼÷Ò ¦¸¡ûÇÄ¡õ.

NATIONAL INSTITUTE OF SIDDHA, CHENNAI – 47
AYOTHIDOSS PANDITHAR HOSPITAL
DEPARTMENT OF MARUTHUVAM

CLINICAL STUDY ON "PITHA PERUMPADU" (DYSFUNCTIONAL UTERINE BLEEDING) AND

THE DRUG OF CHOICE IS "PERUMPADUKU PITTU" (INTERNAL)

FORM VI –INFORMED CONSENT FORM

"I have read the foregoing information, or it has been read to me. I have had the opportunity to ask questions about it and any questions I have asked have been answered to my satisfaction.

I consent voluntarily to participate in this study and understand that I have the right to withdraw from the study at any time without in any way it affecting my further medical care".

"I have received a copy of the information sheet/consent form".

Date:

Signature of the participant

In case of illiterate participant

"I have witnessed the accurate reading of the consent form to the potential participant, and the individual has had the opportunity to ask questions. I confirm that the individual has given consent freely."

Date:

Signature of a witness

Left thumb Impression of the Participant

(Selected by the participant bearing no connection with the survey team)

Date:

Station:

Signature of participant:

Signature of the Investigator:

Signature of the Lecturer:

Signature of the HOD

§¾ºÇ ºÇò¾ ÁÕòÐÅ ¿Ç¨ÚÅÉõ

«§Â¡ò¾Ç¾¡º ÀñÊ¾÷ ÁÕòÐÅÁ¨É, ¦ºý¨É - 47.

Àð¼ §ÁüÀÊôÒ ÁÕòÐÅòÐ¨È

ÀÇò¾¦ÀÕõÀ¡Î §¿¡öì¸¡É ºÇò¾ ÁÕó¾Çý (¦ÀÕõÀ¡ÎìÌ ÀÇðÎ) ÀÃ¢¸Ã¢ôÒò ¾Ç¨Ë¨Éì ¸ñ¼È¢Ôõ ÁÕòÐÅ ¬öÅ¢ü¸¡É ¾¸Åø ÀÊÅõ

FORM VI- ´ôÒ¾ø ÀÊÅõ

¿¡ý §ÁüÜÈ¢Â ¾¸Åø ÀÊÅò¨¾ ÀÊòÐ «øÄÐ ÀÊì¸ §¸ðÎ ¦¸¡ñ§¼ý. Ð ¦¾¡¼÷À¡É Å¢Çì¸í¸¨ÇÔõ §¸ðÎ ¦¾Ã¢óÐ ¦¸¡ñ§¼ý. ±ó¾ Å¢¾ ÅüÒÚò¾Ä¢ýÈ¢, ±ý ¦ºó¾ Å¢ÕôÀò¾¢ý §ÀÃ¢ø ±ý¨É ó¾ ¬Ã¡öîº¢Ìì ¯ðÀÎò¾ ±ý ÓØÁÉ§¾¡Îõ ÍÂ¿¢¨É§Å¡Îõ ºõÁ¾õ ¦¾Ã¢Å¢ì¸¢§ÈÝ. ±ÉìÌ Å¢ÕôÀÁ¢øÄ¡¾ Àðºò¾¢ø ñó¾ ¬Ã¡öîº¢Â¢ø ñÕóÐ ±ý¨É ±ô§À¡Ð§ÅñÎÁ¡É¡Öõ Å¢ÎÅ¢òÐ ¦¸¡ûÙõ ¯Ã¢¨Á¨Â ¦ÀüÚû§Çý ±ýÀ¨¾Ôõ «È¢§Åý.

§¾¾¢:

ñ¼õ: º¡ðº¢Ì¸¡Ã÷ ¨¸¦Â¡ôÀõ:

¦ÀÂ÷:

¨¸¦Â¡ôÀõ: ¯È×Ó¨È :

¦ÀÂ÷ :

NATIONAL PHARMACOVIGILANCE PROGRAMME FOR SIDDHA DRUGS

Reporting Form for Suspected Adverse Reactions to Siddha Drugs

Please note: i. All consumers / patients and reporters information will remain confidential.
ii. It is requested to report all suspected reactions to the concerned, even if it does not have complete data, as soon as possible.

Peripheral Center code: State:

1. Patient / consumer identification (please complete or tick boxes below as appropriate)

Name	Father name	Patient / Record No.
Ethnicity	Occupation	
Address Village / Town Post / Via District / State		Date of Birth / Age: Sex: Male / Female Weight : Degam:

2. Description of the suspected Adverse Reactions (please complete boxes below)

Date and time of initial observation		Season:
Description of reaction		Geographical area:

3. List of all medicines / Formulations including drugs of other systems used by the patient during the reporting period:

Medicine	**Daily dose**	**Route of administration & Vehicle - Adjuvant**	**Date**		**Diagnosis for which medicine taken**
			Starting	**Stopped**	

Siddha					
Any other system of medicines					

4. Brief details of the Siddha Medicine which seems to be toxic :

Details	Drug – 1	Drug – 2	Drug - 3
a) Name of the medicine			
b) Manufacturing unit and batch No. and date			
c) Expiry date			
d) Purchased and obtained from			
e) Composition of the formulation / Part of the drug used			

b) Dietary Restrictions if any

c) Whether the drug is consumed under Institutionally qualified medical supervision or used as self medication.

d) Any other relevant information.

5. Treatment provided for adverse reaction:

6. The result of the adverse reaction / side effect / untoward effects (please complete the boxes below)

Recovered:	Not recovered:	Unknown:	Fatal:	If Fatal Date of death:

Severe: Yes / No.	Reaction abated after drug stopped or dose reduced:
	Reaction reappeared after re introduction:

Was the patient admitted to hospital? If yes, give name and address of hospital	

7. Any laboratory investigations done to evaluate other possibilities? If Yes specify:

8. Whether the patient is suffering with any chronic disorders?

Hepatic Renal Cardiac Diabetes Malnutrition

Any Others

9. H/O previous allergies / Drug reactions:

10. Other illness (please describe):

11. Identification of the reporter:

Type (please tick): Nurse / Doctor / Pharmacist / Health worker / Patient / Attendant / Manufacturer /

Distributor / Supplier / Any others (please specify)
Name:
Address:
Telephone / E – mail if any :

Signature of the reporter: **Date:**

Please send the completed form to:

Name & address of the RRC-ASU / PPC-ASU

The Director

National Institute of Siddha,

(Pharmacovigilance Regional Centre For Siddha Medicine),

Tambaram Sanatorium, Chennai-600 047.

☏ (O) 044-22381314 Fax : 044 – 22381314

Website : www.nischennai.org

Email: nischennaisiddha@yahoo.co.in

* ** * * * *

This filled-in ADR report may be sent within one month of observation /occurrence of ADR

Who Can Report?

⇒ Any Health care professionals like Siddha Doctors / Nurses / Siddha Pharmacists / Patients etc.

What to Report?

⇒ All reactions, Drug interactions,

Confidentiality

⇒ The patient's identity will be held in strict confidence and protected to the fullest extent

Station:

Signature of the Investigator:

Signature of the Lecturer:

Date:

Station:

Signature of the Investigator:

Signature of the Lecturer: Signature of the HOD

NATIONAL INSTITUTE OF SIDDHA, CHENNAI – 47
AYOTHIDASS PANDITHAR HOSPITAL
DEPARTMENT OF MARUTHUVAM

A CLINICAL STUDY ON "PITHA PERUMPADU" (DYSFUNCTIONAL UTERINE BLEEDING) AND

THE DRUG OF CHOICE IS "PERUMPADUKU PITTU" (INTERNAL)

FORM VIII- DIETARY ADVICE FORM

The following diet to be taken:

- Drink adequate water
- Goose berry
- Green vegetables/spinach
- Egg
- Mutton liver
- Watermelon
- Coriander
- Beetroot
- Soya beans
- Nuts
- Pumpkin
- Apple
- Fig fruit
- Honey
- Banana flower
- Pomogranate
- Dates

The following food should be avoided:

- Bitter gourd
- Mango
- Chicken
- Chocolate
- Horse gram
- Tamarind
- Packaged food
- Fatty food stuffs
- Sweetened beverages
- Preserved cool drinks

- Bakery food items
- Oily food
- Excess salty ,spicy food
- Hot foods

§¾ºÂ ºò¾ ÁÕòÐÅ ¿ÚÅÉõ, ¦ºý¨É 47
«§Â¡ò¾¢¾¡º÷ ÀñÊ¾÷ ÁÕòÐÅÁ¨É
¦¸÷ôÀ Å¡Ô §¿¡öì¸¡É ºò¾ ÁÕó¾¢ý (Ý¾¸Å¡Ô §Ä¸¢ÂòÐ¼ý Å£Æ¢ ±ñ¦½ö) ÀÃ¢¸Ã¢ôÒò
¾¢È¨Éì ¸ñ¼È¢Ôõ ÁÕòÐÅ ¬öÅ¢ü¸¡É ¾¸Åø ÀÊÅõ.

FORM VIII – DIETARY ADVICE FORM

§º÷ì¸ ÜÊÂ ¯½× Å¨¸¸û

- ¦¿øÄ¢Ì¸¡ö
- Àî¨º ¸¡ö¸È¢¸û
- «ò¾¢ôÀÆõ
- §ÀÃ£î¨º
- Á¡Ð¨Ç
- §º¡Â¡ À£ýÍ
- ¸£¨Ã¸û
- Óð¨¼
- ¬ðÎ®Ãø
- ¾÷â°½¢
- ¦¸¡òÐÁøÄ¢
- À£ðåð
- À¡¾¡õ
- â°½¢
- ¬ôÀ¢û
- §¾ý
- Å¡¨Æôâ

¾Å¢÷ì¸ ÜÊÂ ¯½× Å¨¸¸û

- À¡¸ø
- Á¡õÀÆõ
- §¸¡Æ¢ì¸È¢
- «¾¢ þÉ¢ôÒûÇ ¯½×¸û
- ¦¸¡ûÙ
- ÒÇ¢
- ±ñ¦½ö, ¦¸¡ØôÒûÇ ¯½×¸û
- «¾¢¸ ¯ôÒ, Á º¡Ä¡ ¦À¡Õð¸û
- ¦ÅôÀÁ¡É ¯½×¸û

PREPARATION OF THE TRAIL DRUG

PREPARATION OF THE DRUGS

SOURCE OF RAW DRUGS

The required raw drugs were collected from kaveri farm virudhachalam. The raw drugs was b authenticated by the Asst. Professor Medicinal botany in NIS Chennai. The raw drugs was purified and the medicine will be prepared as per SOP in Gunapadam laboratory of National Institute of siddha.

REQUIRED RAW DRUGS:

- Bark of *Ziziphus mauritiania,Lam (Ilandapattai)* - 1 palam *(***35gms)**
- Bark of *Lannea coromandelia(houtt)Merr (Othiyampattai)* - 1 palam *(***35gms)**
- Bark of *Syzygium cumini,linn (Naavalpattai)* - 1 palam *(***35gms)**
- Bark of *Ficus racemosa.linn(Athipattai)* - 1 palam *(***35gms)**
- Bark of *Ficus religiosa.linn(Arasapattai)* - 1 palam *(***35gms)**
- Bark of *Mangifera indica.linn(Mampattai)* - 1 palam *(***35gms)**
- Bark of *Acacia nilotica.linn(Velampattai)* - 1 palam *(***35gms)**
- *Raw rice powder(pacharasi maavu)* - 7 pala*m (***245gms)**
- *Palm jaggery (panai vellam)* - 7 palam **(245gms)**

PURIFICATION OF RAW DRUGS

1. The ingredients from 1 to 7 will be purified by scrubbing the outer skin as per the siddha text Marundu Sei Iyalum kalaiyum.[5]

2.Cleaning and drying of raw rice powder

METHOD OF PREPARATION:

[Ref: Athmaratcha Mirtham Ennumvaithiya Sarasangiradam ;Dr.KandasamyMudliyar Sep 2011 (1^{st}) [2]]

Step 1 :

The ingredient from 1 to 7 was pulverized and filtered.

step 2 :

Add equal amount of raw rice powder to the above pulverized powder and then add the equal amount of palm jaggery.

step 3 :

The above mixture was subjected to baking procedure.

Drug Storage:

The prepared drug will be stored in clean and dry air tight glass container.

DRUG REVIEW

DRUG REVIEW

RAW DRUGS:

- Bark of *Ziziphus mauritiania,Lam (Ilandapattai***)**

- Bark of *Lannea coromandelia(houtt)Merr (Othiyampattai)*
- Bark of *Syzygium cumini,linn (Naavalpattai***)**
- Bark of *Ficus racemosa.linn(Athipattai***)**
- Bark of *Ficus religiosa.linn(Arasapattai***)**
- Bark of *Mangifera indica.linn(Mampattai***)**
- Bark of *Acacia nilotica.linn(Velampattai***)**
- *Raw rice powder(pacharasi maavu***)**
- *Palm jaggery (panai vellam)*

கருவேல் பட்டை

வேறுபெயர்:

கருவேலம், வேல்

Botanical Name ;*Acacia nilotica*,linn.

Family:Mimosaceae

- சுவை – துவர்ப்பு
- தன்மை – தட்பம்
- பிரிவு- இனிப்பு

செய்கை

துவர்ப்பி

பொது குணம்:

தந்தம் இருகுந் தனிச்சூதப் புண்ணாறும்
வந்தசுரம் பித்தம் மடியுங்காண் - பந்த
மருவே யகலா மலரளக மாதே!
கருவேலம் பட்டைக்குக் காண்.

Bark of the Acacia nilotica contains

Catechin-5-galloyl ester,

novel polyphenol ,

Gallic acid,

Methyl ester,

Naringenin.[20&21]

மாம் பட்டை

வேறுபெயர்கள்:

ஆயிரம். ஆம்பிரம், எகின், சிஞ்சம், கொக்கு, சூதம், ரேஷம், குதிரை, ஓமை, சேதாரம், மாழை, மாந்தி.

Botanical Name:

Mangifera indica Linn.

Family: ANACARDIACEAE

- சுவை துவர்ப்பு
- தன்மை: வெப்பம்
- பிரிவு: கார்ப்பு

செய்கை:

துவர்ப்பி

உரமாக்கி

Bark of the Mangifera contains

16-20% of Tannins

Mangiferine[20&21]

அத்திப்பட்டை

வேறுபெயர்கள்:

ஆதம, அதவு, உதும்பரம், கோளி, சுப்பிரதஷ்டம்

Botanical name:

Ficus racemosa linn .

Family: MORACEAE

சுவை துவர்ப்பு

தன்மை: தட்பம்

பிரிவு: இனிப்பு

செய்கை: துவர்ப்பி

பொது குணம்:

வீறு கடுப்பிரத்தம் வெண்சீத ரத்தமொடு

நாறுவிர ணங்களெலாம் நாடாவாம் கூறுங்கால்

அத்திரு மேகம் போம் ஆயிழையே! எந்நான்றும்

அத்திப்பால் பட்டைக் கறி

- அகத்தியர் குணவாகடம்

பொருள்:

பட்டை, கீழ்வாய்கடுப்பு குருதிபோக்கு, சீதக்கழிச்சல், நாற்றமுள்ள புண்கள், வெள்ளை ஆகியவைகளைப் போக்கும்.

Bark of *Ficus racemosa* contains

Glycoside

Beta –D-Carboxy benzoic acid,

Bergenins,

Ferulic acid, [20&21].

அரசம்பட்டை

வேறுபெயர்கள்:

ஆஸ்வத்தம், அச்சுவத்தம், திருமரம், கவலை, பேதி, பானை, கணவம், சராசனம், பிப்பிலம்

Botanical Name:*Ficus religiosa*, linn

Family: MORACEAE

சுவை: துவர்ப்பு, கைப்பு

தன்மை: தட்பம்

பிரிவு: இனிப்பு

செய்கை

துவர்ப்பி

Bark of the *Ficus religiosa contains*

Alpha-octcosmol,

Methyl oleomolate,

Lanosterol,

Beta-sitosterol

Stigmasterol. [20&21]

நாவல்பட்டை

வேறுபெயர்கள்:

நவ்வல், நம்பு, சம்பு, சாதவம், ஆருகதம், நேரேடு, நேரேடம், சாட்டுவலம், சாம்பல், சுரபிபத்திரை.

Botanical Name*: Syzygium cumini* (linn) Sheels

Family:MYRTACEAE

சுவை: துவர்ப்பு

தன்மை: தட்பம்

பிரிவு: கார்ப்பு

செய்கை:

துவர்ப்பி

பொது குணம்:

ஆசியநோய் காசம் அசிர்க்கரந்சு வாசவினை

கேசமுறு பாலசிரகநோய் - பேசரிய

மாவியங்க லாஞ்சன மிவ வன்பிணையெ லாமேரும்

நாவலுறு பட்டையதனால்

- அகத்தியர் குணவாகடம்

பொருள்: பட்டையினால், வாயிற்பிறக்கும் நோய்கள், இருமல், பெரும்பாடு, ஈளை குழந்தைகளுக்குண்டாகும் பள் முதலியகுற்றம் நீங்கும்

Bark of the Syzygium contains

Berginin,

Gallic acid ,

Ethyl gallate,

Ellagic acid. [20&21]

<u>ஓதியம்பட்டை</u>

வேறு பெயர்: மோதகம்

Botanical Name*:Lannea coromandelica* ,(Houtt)Merr

Family:ANACARDIACEAE

சுவை: துவர்ப்பு

தன்மை: வெப்பம்

பிரிவு: கார்ப்பு

செய்கை: துவர்ப்பி

உரமாக்கி

குருதிப் பெருக்கடக்கி

தோத்து புழுவகற்றி

Bark of Lannea contains

quercetin ,

Aralia cerebroside ,

5,5′-dibuthoxy-2,2′-bifuran,

β-sitosteryl-3β-glucopyranoside-6′-O-palmitate,

β-sitosterol palmitate ,

myricadiol , protocatechuic acid , p-hydroxybenzoic acidethyl ester , isovanillin , trans-cinnamic acid , palmitic acid , and stearic acid[20&21]

இலந்தைப் பட்டை

வேறு பெயர்கள்:

இலந்தை, குல்லதி, குல்வலி, கோல், கோற்கொடி, வதரி,

Botanical Name:

Ziziphus Mauritiania, Lam .

Family:RHAMNACEAE

சுவை – துவர்ப்பு

இனிப்புத் தன்மை, தடபம்,

பிரிவு- இனிப்பு செய்கை:

பட்டை – தவர்ப்பி

Alkaloids:

4 – 9% Tannins
Cyclopeptide Alkaloids
Amphibines B, B&F ; Mauritines A-F[20&21]

பிட்டு

அரிசிமாவில் பிட்டு செய்து உண்பருக்கு, வன்மையும், உள்ளே வளி வெப்பமும் உண்டாகும். பெண்களின் மங்கைப் பருவகாலத்தில் மிதமின்றி ஒழுகுகிற குருதி கட்டுப்பட்டுத் தெளிவை உறும்

செம்புனலுங் கட்டுத் தெளிவும் உரமாரும்

வெம்பனிலம் உட்புறத்தில் வீறுங்காண் - செம்பழத்தை

வட்டைப் பழிக்கும் வன்முலைமா தே! யரிசிப்

பிட்டைப் புசிப்போர்க்குப் பேசு

-அகத்தியர் குணவாகடம்

பனைவெல்லம்: பனை வெல்லத்தால், முக்குற்றத்தால் வரும் நோய்களும், முப்பிணி, சுவையின்மை குன்மம் இவைகளும் நீங்கும்

……தங்குபனை

வெல்லத்தால் வாதபித்தம் வீறுகபஞ் சன்னிநோய்

வல்லருசி குன்மமற மால்”. -அகத்தியர் குணவாகடம்

BIO CHEMICAL ANALYSIS OF THE DRUG

BIO CHEMICAL ANALYSIS OF PERUMPADUKKU PITTU .

The biochemical analysis of Perumpadukku Pittu was done in Bio chemistry lab, National Institute of Siddha.

S.No	EXPERIMENT	OBSERVATION	INFERENCE

1.	Appearance of the sample	Dark brown in color	
2.	**Test for Slicate** a. A 500mg of the sample was shaken well with distilled water. b. A 500 mg of the sample wa c. s shaken well with	Sparingly soluble	**Presence of Silicate**
3.	**Action of Heat:** A small amount of the sample was taken in a dry test tube and heated gently at first and then strong.	White fumes evolved. No brown fumes.	**Presence of Carbonate** Absence of Nitrate.
4.	**Flame Test:** A small amount of the sample was made into a paste with con. Hcl in a watch glass and introduced into non-luminous part of the bunsen flame.	No bluish green flame appeared	Absence of copper
5.	**Ash Test:** A filter paper was soaked into a mixture of sample and cobalt nitrate solution and introduced into the bunsen flame and ignited.	No yellow color flame appeared	Absence of sodium

Preparation of Extract:

5gm of Perumpadukku Pittu was weighted accurately and placed in a 250ml clean beaker and added with 50ml of distilled water. Then it was boiled well for about 10 minutes. Then it was cooled and filtered in a 100ml volumetric flask and made up to 100ml with distilled water. This preparation was used for the qualitative analysis of acidic/basic radicals and biochemical constituents in it.

S.No	EXPERIMENT	OBSERVATION	INFERENCE
	I. Test For Acid Radicals		
1.	**Test For Sulphate:** a.2ml of the above prepared extract was taken in a test tube to this 2ml of 4%dil. ammonium oxalate solution was added. b.2ml of the above prepared extract was added with 2ml of dil.Hcl until the effervescence ceases off. Then 2ml of Barium chloride solution was added.	No cloudy appearance present No white precipitate insoluble in con. Hcl was obtained	Absence of Sulphate No Sulphate was confirmed
2.	**Test For Chloride:** 2ml of the above prepared extracts was added with 2ml of dil.Hcl was added until the effervescence ceases off. Then 2ml of silver nitrate solution was added	Cloudy appearance present.	**Presence of Chloride**
3.	**Test For Phosphate:** 2ml of the extract was treated with 2ml of dil.ammonium molybdate solution and 2ml of con.HN03	No Cloudy yellow appearance	Absence of Phosphate
4.	**Test For Carbonate:** 2ml of the extract was treated with 2ml dil. magnesium sulphate solution	Cloudy appearance absent	Absence of carbonate
5.	**Test For Nitrate:** 1gm of the extract was heated with copper turnings and concentrated H2SO4 and viewed the test tube vertically down.	No characteristic changes	Absence of nitrate

6.	**Test For Sulphide:** 1gm of the extract was treated with 2ml of con. HCL	No rotten egg smelling gas was evolved	Absence of sulphide
7.	**Test For Fluoride & Oxalate:** 2ml of extract was added with 2ml of dil. Acetic acid and 2ml dil.calcium chloride solution and heated.	No cloudy appearance.	Absence of fluoride and oxalate
8.	**Test For Nitrite:** 3drops of the extract was placed on a filter paper, on that 2 drops of dil.acetic acid and 2 drops of dil.benzidine solution were placed.	No characteristic changes	Absence of nitrite
9.	**Test For Borate:** 50mg of the extract was made into paste by using dil.sulphuric acid and alcohol (95%) and introduced into the blue flame.	No bluish green color flame appeared	Absence of borate
II. **Test For Basic Radicals**			
1.	**Test For Lead:** 2ml of the extract was added with 2ml of dil.potassium iodine solution.	No Yellow precipitate was obtained.	Absence of lead
2.	**Test For Copper:** **a.** 50mg of extract was made into paste with con. Hcl in a watch glass and introduced into the non-luminous part of the flame. **b.** 2ml of extract was added with excess of ammonia solution	No blue color precipitate No blue color precipitate	Absence of copper

3.	**Test For Aluminium:** To the 2ml of extract dil.sodium hydroxide was added in 5 drops to excess.	No characteristic changes	Absence of Aluminium
4.	**Test For Iron:** a. 2ml of extract was added with 2ml of dil.ammonium thiocyanate solution. b. To the 2ml of extract added 2ml of ammonium thiocyanate solution and 2ml of con.HNO3 was added.	Red color appeared. Blood red color appeared	**Presence of Iron** **Presence of Iron**
5.	**Test For Zinc:** To 2ml of the extract dil.sodium hydroxide solution was added in 5drops to excess and dil.ammonium chloride was added.	No white precipitate was formed	Absence of Zinc
6.	**Test For Calcium:** 2ml of the extract was added with 2ml of 4% dil.ammonium oxalate solution.	No cloudy appearance and white precipitate was formed	Absence of calcium
7.	**Test For Magnesium:** To 2ml of extract dil.sodium hydroxide solution was added in 5 drops to excess.	No White precipitate was obtained	Absence of magnesium
8.	**Test For Ammonium:** To 2ml of extract 1 ml of Nessler's reagent and excess of dil.sodium hydroxide solution were added.	No Brown color appeared	Absence of ammonium

9.	**Test For Potassium:** 25mg of extract was treated with 2ml of dil.sodium nitrite solution and then treated with 2ml of dil.cobalt nitrate in 30% dil.glacial acetic acid.	No Yellow precipitate was obtained	Absence of potassium
10.	**Test For Sodium**: 50mg of the extract was made into paste by using HCl and introduced into the blue flame of bunsen burner.	No yellow color flame evolved.	Absence of sodium
11.	**Test For Mercury**: 2ml of the extract was treated with 2ml of dil.sodium hydroxide solution.	No Yellow precipitate was obtained	Absence of Mercury
12.	**Test For Arsenic:** 2ml of the extract was treated with 2ml of dil.sodium hydroxide solution.	No Brownish red precipitate was obtained	Absence of arsenic.
III. **Miscellaneous**			
1.	**Test For Starch**: 2ml of extract was treated with weak dil.Iodine solution	Blue color developed	**Presence of starch**

2.	**Test For Reducing Sugar**: 5ml of Benedict's qualitative solution was taken in a test tube and allowed to boil for 2 minutes and add 8 to 10 drops of the extract then again boil it for 2 minutes. The color changes were noted.	Brick red color was developed	**Presence of reducing sugar**
3.	**Test For The Alkaloids**: a) 2ml of the extract was treated with 2ml of dil.potassium Iodide solution. b) 2ml of the extract was treated with 2ml of dil.picric acid. c) 2ml of the extract was treated with 2ml of dil.phospho tungstic acid.	Yellow color developed	**Presence of Alkaloid**
4.	**Test For Tannic Acid:** 2ml of extract was treated with 2ml of dil.ferric chloride solution	Black precipitate was obtained	**Presence of Tannic acid**
5.	**Test For Unsaturated Compound**: To the 2ml of extract 2ml of dil.Potassium permanganate solution was added.	Potassium permanganate was not decolorized	Absence of unsaturated compound
6.	**Test For Amino Acid**: 2 drops of the extract was placed on a filter paper and dried well. 20ml of Burette reagent was added.	No violet color	Absence of amino acid

RESULT:

Presence of

Silicate,

Carbonate,

Chloride,

Iron,

Starch,

Reducing Sugar,

Tannic Acid**.**

CERTIFICATES

The Tamil Nadu Dr.M.G.R. Medical University

#69, Anna salai, Guindy, Chennai-600 032.

This certificate is awarded to

Dr./~~Mr.~~/~~Ms.~~ P. KAMALA SOUNDARAM

for participating as ~~Resource~~ ~~Person~~ / Delegate in the Fourteenth Workshop on

"Research Methodology & Biostatistics"

for AYUSH Post Graduates & Researchers

Organised by the Department of Siddha

The Tamil Nadu Dr. M.G.R. Medical University from 5th to 9th May 2014.

Dr. N. KABILAN M.D. (Siddha)
Reader, Dept. of Siddha

Dr. JHANSI CHARLES, M.D.
Registrar

Prof. Dr. D. SHANTHARAM, M.D., D.Diab.,
Vice-Chancellor

NATIONAL INSTITUTE OF SIDDHA, CHENNAI – 600047

BOTANICAL CERTIFICATE

Certified that the following plant drugs used in the Siddha formulation "**Perumpadukku Pittu**" (Internal) for Pitha Perumpadu (Dysfunctional Uterine Bleeding) taken up for Post Graduation Dissertation studies by **Dr.P.Kamalasoundaram**, M.D.(S), III year, Department of Maruthuvam, 2015, are identified through Visual inspection, Experience, Education & Training, Organoleptic characters, Morphology, Micromorphology and Taxonomical methods as

Ziziphus jujuba Lam. (Rhamnaceae), Stem bark
Lannea coromandelica (Hout.) Merrill (Anacardiaceae), Stem bark
Syzygium cumini Linn. (Myrtaceae), Stem Bark
Ficus racemosa Linn. (Moraceae), Stem Bark
Ficus religiosa Linn. (Moraceae), Stem bark
Mangifera indica Linn. (Anacardiaceae), Stem bark
Acacia senegal (L.) Willd. (Mimosaceae), Stem Bark
Oryza sativa Linn. (Poaceae), Seed

MEDICINAL BOTANY CHENNAI 600 047 National Institute of Siddha

Certificate No: NISMB2082015

Date: 21-12-2015

Authorized Signatory
Dr. D. ARAVIND, M.D.(S),M.Sc.,
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F.No.NIS/6-20/IEC/14-15 Dt: 25.09.14

CERTIFICATE

Address of Ethics Committee: National Institute of Siddha, Tambaram Sanatorium, Chennai-600047, Tamil Nadu, India	
Principal Investigator: Dr.P.Kamalasoundaram, P.G. Student, Maruthuvam	
Protocol title: Clinical evaluation of Siddha medicine Perumpaduku pittu in the treatment of Pitha perumpadu (Dysfunctional uterine bleeding)	
Documents filed	1) Protocol, 2) Data Collection forms 3) Patient Information Sheet 4) Consent form 5) SAE(Pharmacovigilance)
Clinical trial Protocol (others – Specify)	**Yes**
Informed consent documents	**Yes**
Any other documents	-
Date of IEC approval & its number	**NIS/IEC/8-14/7 - 26-08-2014**

We approve the trial to be conducted in its presented form.

The Institutional Ethics Committee expects to be informed about the progress of the study, any SAE occurring in the course of the study, any changes in the protocol and patient information / informed consent.

Chairman

Member Secretary

சித்த மருத்துவ மைய அராய்ச்சி நிலையம், சென்னை — 600 106
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15.06.2016

Name of the student: Dr. P. Kamalasoundaram, III Year MD Student,
Department of Maruthuvam, National Institute of Siddha, Sanatorium, Chennai-600 047.

PHYSICO-CHEMICAL ANALYSIS OF PERUMPADUKKU PITTU

S.No	Parameter		Mean
1.	Loss on Drying at 105°C	:	19.816 %
2.	Total ash	:	3.728 %
3.	Water soluble Ash	:	1.025 %
4.	Acid insoluble Ash	:	0.065 %
5.	Water soluble extractives	:	43.331 %
6.	Alcohol soluble extractives	:	33.988 %
7.	pH	:	7.03
8.	Total Sugar	:	7.3 %
9.	HPTLC	:	Enclosed

(R. Shakila)
Research Officer (Chemistry)

15/6/16

(Dr. P. Sathiyarajeswaran)
Assistant Director (Scientist 2) I/c

Dr. P. SATHIYARAJESWARAN
Assistant Director (Scientist-2) 1/C
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